

CAUSE NO. 262-94
VICKI STACKS, as Next Friend IN THE DISTRICT COURT
of Shannon Moore, A Minor,
Plaintiff,

v.

PHILIP MORRIS INCORPORATED; JOHNSON COUNTY, TEXAS
PHILIP MORRIS U.S.A.; and
SHELLY MOORE,

Defendants. 18TH JUDICIAL DISTRICT

* * * * *

ORAL DEPOSITION OF
NAVIN GAUTAM

NOVEMBER 6, 2000

* * * * *

ORAL DEPOSITION OF NAVIN GAUTAM, produced as
a witness at the instance of the Plaintiff, and duly
sworn, was taken in the above-styled and numbered cause
on the 6th day of November, 2000, from 9:06 a.m. to
1:05 p.m., before Valarie L. Schmit, RPR, in and for
the State of Virginia, reported by Stenograph Machine,
at the offices of Hunton & Williams, 951 East Byrd
Street, Richmond, Virginia 23219, pursuant to the
Texas Rules of Civil Procedure and the provisions
stated on the record or attached hereto.

A P P E A R A N C E S

FOR THE PLAINTIFF:

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Mr. Lynn Grisham
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FOR THE DEFENDANT PHILIP MORRIS INCORPORATED
and PHILIP MORRIS U.S.A.:

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ALSO PRESENT:

T. Wright, Videoworks

I N D E X

Appearances

NAVIN GAUTAM

Examination by Mr. Grisham

E X H I B I T S

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1 NAVIN GAUTAM,
2 was sworn and testified as follows:

3
4 EXAMINATION

5 BY MR. GRISHAM:

6 Q State your full name for the record,
7 please, sir.

8 A Navin Gautam.

9 Q Mr. Gautam, how are you currently
10 employed?

11 A I'm employed with Philip Morris USA.

12 Q How long have you been employed with
13 Philip Morris USA?

14 A Eleven -- almost eleven years.

15 Q Before we proceed much further,
16 Mr. Gautam, have you ever given your deposition
17 before today?

18 A No, I have not.

19 Q Have you had an opportunity to talk with
20 Mr. Crampton or someone else for the legal defense
21 team about what a deposition is?

22 A Yes.

23 Q You understand that today I'll be asking
24 you a series of questions over the course of a couple
25 of hours, maybe a little longer, about topics that

1 have arisen in a lawsuit that's pending in Texas?

2 A That's correct.

3 Q And as a result of those questions and in
4 response thereto, you'll be expected to give verbal
5 answers, just like you've been doing thus far, so
6 that the court reporter can accurately write those
7 down and print them into a booklet form, which you'll
8 have a chance to review.

9 A Yes.

10 Q Can we agree that should any questions
11 arise on your behalf because some of my questions are
12 unclear, they're phrased poorly, or perhaps you don't
13 understand what I'm getting at, that you'll tell me
14 that so I can rephrase the question?

15 A Yes, I will.

16 Q And if we can maintain that agreement, is
17 it fair to say that whatever answers you give will be
18 to the questions that you've understood before we
19 leave here today?

20 A Yes, that's what I'll try.

21 Q In other words, if something -- if you're
22 unclear about something, you'll tell me before we
23 leave the room here today so that I can rephrase the
24 question?

25 A Yes, I will try.

1 Q Finally, if we get to the point where you
2 need to take a break, you realize that you have the
3 right to tell us that, and we'll be happy to
4 accommodate that so that you're not uncomfortable?

5 A Okay.

6 Q On how many occasions have you met with
7 someone representing Philip Morris in this particular
8 case to prepare for the deposition or to discuss this
9 case?

10 MR. CRAMPTON: You're talking about
11 meetings with counsel?

12 MR. GRISHAM: Yes.

13 A Twice, including today.

14 BY MR. GRISHAM:

15 Q I assume that you met with someone this
16 morning before the deposition?

17 A Yes. My counsel and I met.

18 Q All right. Before this morning, when did
19 you meet with someone about the deposition?

20 A Say it again?

21 Q When did you meet with someone about the
22 deposition before this morning?

23 A Her name is Nicola Heskett.

24 Q Correct.

25 A She works with Bill, I suppose.

1 MR. CRAMPTON: The question was when did
2 you meet.
3 A When?
4 BY MR. GRISHAM:
5 Q Yes.
6 A Okay. I think it was a couple of weeks
7 ago, maybe, I'm not sure, on 16th of October.
8 Q Have you reviewed any testimony in
9 preparation for your deposition here today, like
10 other deposition transcripts?
11 A I don't think so.
12 Q Haven't read any of those?
13 A I haven't read any depositions, as far as
14 I know.
15 Q Have you reviewed any documents in
16 preparation for your deposition?
17 A I have looked at some documents, yes.
18 Q What all have you looked at?
19 MR. CRAMPTON: Hold on. I may have an
20 objection.
21 You're talking about documents that
22 counsel showed to him?
23 MR. GRISHAM: Any documents.
24 MR. CRAMPTON: Okay. What I want to do
25 is object and instruct the witness not to answer any

1 questions related to any documents that counsel
2 showed him in preparation for a deposition but will
3 allow him to answer any questions related to anything
4 else that he reviewed on his own.

5 MR. GRISHAM: So you're directing him not
6 to answer the question?

7 MR. CRAMPTON: To the extent you're
8 talking about documents that were shown to him by
9 counsel, which would be the counsel's opinion work
10 product, I instruct the witness not to answer that
11 question.

12 BY MR. GRISHAM:

13 Q All right. Let's -- if there is an
14 answer that you need to make, I'll ask some follow-up
15 questions, but go ahead if you have some answer set
16 with those limitations.

17 A I have not reviewed other documents
18 recently in connection with this. But from time to
19 time, because I was involved in the project, I do see
20 something related, some work related to the project
21 from time to time, but I have not reviewed any
22 documents in preparation for this.

23 Q All right. Let's talk for a moment
24 before we move on about documents that you have
25 reviewed in preparation for your testimony today.

1 Okay?

2 Can you tell me about how many documents
3 that is?

4 MR. CRAMPTON: I'm sorry. You're talking
5 about documents shown to him by counsel?

6 MR. GRISHAM: Absolutely.

7 MR. CRAMPTON: I'm objecting and
8 instructing the witness not to answer.

9 MR. GRISHAM: Of course, the question was
10 how many. You're telling him not to answer that
11 question?

12 MR. CRAMPTON: Instructing the witness
13 not to answer how many.

14 BY MR. GRISHAM:

15 Q Can you tell me the source of any
16 documents that you looked at in preparation for
17 your -- for your deposition? In other words, were
18 they Philip Morris documents?

19 A I don't understand the question. Is it
20 again related to the -- to the documents that the
21 counsel showed?

22 Q Yes.

23 A I've been instructed not to answer that.

24 Q I don't know -- and you may be instructed
25 in a moment, but thus far, there hasn't been one with

1 regard to this question. And the question is were
2 the documents that Mr. Crampton or anyone else showed
3 you that you used to get ready for today's deposition
4 documents that were Philip Morris documents?

5 MR. CRAMPTON: Hold on. The question was
6 the source of documents that were Philip Morris
7 documents?

8 BY MR. GRISHAM:

9 Q No, the question that is pending is this.
10 My understanding, you looked at documents
11 that counsel for Philip Morris showed you to prepare
12 for today's deposition; is that true?

13 MR. CRAMPTON: You can answer that.

14 A Yes.

15 BY MR. GRISHAM:

16 Q And what I'm trying to find out is the
17 type of documents those were, because I may want to
18 take this matter up with the Court. And so what I --
19 first thing I want to know was -- is this.

20 Were any of those documents documents
21 that belonged to Philip Morris?

22 MR. CRAMPTON: I'm going to object and
23 instruct the witness not to answer that question.

24 MR. GRISHAM: Okay.

25 BY MR. GRISHAM:

1 Q Were any of the documents that you relied
2 upon in getting ready for your deposition here today
3 documents that persons outside of Philip Morris may
4 have seen in the past?

5 MR. CRAMPTON: Same objection and same
6 instruction. Don't answer that question.

7 For the record, the basis of the
8 objection is that it's opinion work product what
9 documents we show.

10 MR. GRISHAM: And in order that I may
11 take this matter up before the Court, it's necessary
12 that I inquire into areas surrounding those
13 documents, including their source, origination and
14 time; otherwise, I'm not able to make a record so
15 that I can bring this to the Court's attention. So
16 that's why I'm persisting in asking these questions.
17 In order that we not rely solely on counsel's
18 interpretation of what these documents are and
19 whether or not they're privileged or protected in
20 some fashion, then we need to have some idea of what
21 they are.

22 MR. CRAMPTON: Well, to the extent that
23 this witness has looked at documents that were --
24 that were documents that were selected by counsel to
25 review with him, that is opinion work product, and so

1 I can't allow him to answer questions that tell you
2 which documents those were. And however you try to
3 parse it, it still comes down to you're trying to
4 figure out which ones they were.

5 MR. GRISHAM: Actually, I'm trying to
6 figure out the types so that I can bring a motion
7 before the Court with regard to that, and that's why
8 I was asking -- without particularly seeking which
9 documents they were, I was trying to get some broad
10 categorizations of the type and source of those
11 documents. And I guess if we can't get there, we
12 just can't get there today.

13 MR. CRAMPTON: Well, let's go off the
14 record for a minute.

15 MR. GRISHAM: I'd prefer not to at this
16 point.

17 MR. CRAMPTON: All right. Then let's
18 just go forward.

19 MR. GRISHAM: Okay.

20 BY MR. GRISHAM:

21 Q Did you review any documents, other than
22 those showed to you by counsel, to prepare here
23 today?

24 A No.

25 Q Were the documents that you reviewed that

1 were showed to you by counsel used by you to refresh
2 your memory of some of the things that happened back
3 during the time you were working on this project?

4 MR. CRAMPTON: You can answer that.

5 A Not really.

6 BY MR. GRISHAM:

7 Q They didn't refresh your memory at all?

8 A No.

9 Q So you were able to recollect --

10 A There was some documents that kind of
11 refreshed my memory, but not -- not a whole lot.

12 Q Okay. Can you tell me about what the
13 quantity of documents were?

14 MR. CRAMPTON: Yeah, you can answer that.

15 A You mean number of documents?

16 BY MR. GRISHAM:

17 Q Yes, however you can best quantify it,
18 whether it be number of documents, how many inches
19 thick.

20 A Was fairly quick. There were not a lot
21 of documents. The best way I would say, maybe ten to
22 twenty, if I recall correctly.

23 Q Were any of the documents that you
24 reviewed in anticipation of your deposition documents
25 that were authored by you in the past?

1 A I don't recall.

2

3 (Gautam Exhibit No. 1 was marked.)

4

5 BY MR. GRISHAM:

6 Q I want to hand you what's been marked as
7 Exhibit 1 to your deposition, which is a CV that you
8 provided to us this morning, ask you to review it for
9 a moment.

10 A What do you want me to say, just --

11 MR. CRAMPTON: Just take a look at it.

12 BY MR. GRISHAM:

13 Q Just take a look at it.

14 A Okay.

15 Q Is Exhibit Number 1 a current CV --

16 A Yes.

17 Q -- that outlines your experience,
18 educational background and work history?

19 A Yes.

20 Q We're going to go over -- if I could see
21 it, I'd like to go over just a few of those past jobs
22 and educational experiences that you've had which are
23 listed on here.

24 Before we go on, though, I want to touch
25 back on these documents that you reviewed in

1 anticipation of your deposition.

2 Can you tell me about how much time you
3 spent reviewing those documents?

4 MR. CRAMPTON: Go ahead.

5 A About an hour.

6 BY MR. GRISHAM:

7 Q Was there anyone else present, other than
8 counsel for Philip Morris, when you reviewed the
9 documents?

10 A No.

11 Q Where did the review take place?

12 A In my office at Philip Morris, Operations
13 Center, in Richmond.

14 Q Now, from looking at Exhibit 1, it
15 appears that you first went to work for Philip Morris
16 in September of 1989; is that correct?

17 A That is correct.

18 Q And before you went to Philip Morris,
19 your background had essentially been that of
20 obtaining your education and, apparently, working at
21 a paper mill in India; correct?

22 A That is correct.

23 Q What was the name of the paper mill that
24 you worked at?

25 A West Coast Paper Mills, Ltd.

1 Q What did you do for that organization?

2 A I was shift engineer. Shift in charge is
3 what they call, but it's equivalent to process
4 engineer in the U.S. paper mills. And I supervised
5 production of papers, and I worked on certain
6 projects.

7 Q You were in that job from 1984 to 1987?

8 A That is correct.

9 Q And from 1987 to 1989, you were a
10 graduate student at Miami University?

11 A That is correct.

12 Q During the time that you were working for
13 West Coast Paper Mills, did you work on any projects
14 that dealt with Philip Morris?

15 A No.

16 Q Did you have any interaction with Philip
17 Morris or its employees?

18 A No.

19 Q Did the company that you worked for
20 provide any products to Philip Morris?

21 A Not that I know of.

22 Q When you were a graduate student at Miami
23 University, did you have any connection with Philip
24 Morris, either as an employee or consultant?

25 A No.

1 Q Now, your graduate degree at Miami
2 University was in paper science and engineering?

3 A That is correct.

4 Q What is that field, in particular? What
5 does it deal with?

6 A It's an applied engineering field in the
7 area of paper technology. So it is sort of chemical
8 engineering with a specialization in paper industry
9 and paper processes.

10 Q During the time that you were working at
11 West Coast Paper Mills, did you have any
12 responsibility to work with cigarette papers?

13 A No.

14 Q In your studies at Miami University in
15 paper science and engineering, did you have any
16 exposure to cigarette paper?

17 A No.

18 Q Now, your undergraduate degree is in pulp
19 and paper technology; correct?

20 A That is correct.

21 Q And where did you obtain that degree?

22 A In India from Roorkee University.

23 Q While studying at Roorkee University, did
24 you have any exposure to cigarette papers?

25 A I had visited a paper mill which

1 manufactured cigarette papers.

2 Q Was that a visit that simply involved you
3 observing the operations of the plant?

4 A That is correct.

5 Q Until you began working at Philip Morris,
6 did you have any enhanced knowledge or skill or
7 ability with regard to the manufacture or design of
8 cigarette papers?

9 A No, not experience. I don't think so.

10 Q When you began working for Philip Morris
11 in September of 1989, what was your job title?

12 A My job title was engineer.

13 Q What were your responsibilities?

14 A I was hired as a paper specialist so I
15 was assigned projects related to paper technologies
16 in the tobacco industry. So I worked on projects
17 that related to cigarette papers, tipping papers,
18 papers used in the filters.

19 Q What are tipping papers?

20 A Tipping paper is the paper that is used
21 to wrap the butt end of the cigarette.

22 Q Now, the first job that you had was in
23 the Filter And Paper Technology Group of Research and
24 Development, which apparently lasted about three
25 years?

1 A Yes.

2 Q And during that time did you work on
3 various different projects dealing with the areas
4 you've already described?

5 A That is correct.

6 Q During that time period did you work on
7 any project that dealt with either self-extinguishing
8 cigarettes or reduced ignition propensity cigarettes?

9 A I worked on banded paper project, which
10 is reduced ignition propensity project.

11 Q Did your exposure to banded paper
12 products first begin when you went to work for Philip
13 Morris?

14 A That is correct.

15 Q And were you exposed to that concept,
16 that design concept in 1989 when you first went to
17 work for Philip Morris?

18 A I -- the concept of banded paper I was
19 exposed to probably in late '89 or early '90 for the
20 first time.

21 Q Who told you about that design concept?

22 A I do not remember exactly who.

23 Q What was the first task that you were
24 given with regard to the banded paper project?

25 A I think the first project that I had was

1 to come up with a way to apply bands on cigarette
2 papers while we manufacture the cigarette paper. So
3 at the same time when we are manufacturing paper,
4 apply bands.

5 Q About when were you assigned that task?

6 A I think it was either late '89 or early
7 '90.

8 Q At that time did Philip Morris
9 manufacture any of its own cigarette papers?

10 A Not that I know of.

11 Q And the reason I ask that is your work in
12 the research and development area involved you
13 researching the application of bands to paper, and
14 Philip Morris didn't make its own paper. So I was
15 wondering why, if you know, you were assigned that
16 task?

17 A Well, we -- we had -- you know, we were
18 purchasing cigarette paper from one of our suppliers,
19 and we also had a group of engineers and scientists
20 who were doing research in the area of cigarette
21 papers. I was part of that group. And we worked
22 with our cigarette paper suppliers on many of the
23 paper type projects.

24 Q So your work, then, with the Paper
25 Technology Group in 1989 or early '90 began with a

1 joint effort between your group and some of the paper
2 suppliers?

3 A Well, if I may correct. On this project
4 initially, on banded paper project or the project
5 that I was involved with putting bands on paper while
6 manufacturing, we did not work immediately with our
7 cigarette paper suppliers initially. It was project
8 that some of us in Philip Morris did. We worked on
9 it.

10 Q Sorry. Didn't mean to interrupt you.

11 Did the project have a particular name?

12 A I don't remember exactly. I mean, I call
13 it banded paper project.

14 Q I've seen several names in the documents.
15 Project Tomorrow is one of them.

16 A And --

17 Q Project Happen is another name that I've
18 seen. Are you familiar with either of those project
19 names?

20 A Yes, I am and --

21 Q Did your -- I'm sorry. Go ahead.

22 A Those -- both of those projects were
23 related to banded paper at different times, so same
24 projects.

25 Q While you were working in the Paper

1 Technology Group, did anyone at Philip Morris ever
2 tell you that banded paper was the concept that
3 Philip Morris intended to adopt for a reduced
4 ignition propensity or self-extinguishing cigarette?

5 MR. CRAMPTON: Just are you talking about
6 the initial project that he was referring to in '89
7 or '90 or at any time?

8 MR. GRISHAM: Well, I was referring to
9 the 1989 to 1992 period when he was with the Paper
10 Technology Group.

11 A That was the objective of the project.

12 BY MR. GRISHAM:

13 Q Do you recall who told you that?

14 A No, I do not.

15 Q About what year would you have first been
16 told that?

17 A I would say about the same time when I
18 started working on the project, because that's how
19 the project was explained to me is that we're
20 developing banded paper for this purpose.

21 Q At that time were you either told or
22 provided information so that you could see what work
23 had been going on before you began to participate in
24 the program on banded paper?

25 A Can you repeat the question?

1 Q Sure. At the time you went to work for
2 Paper Technology Group and you were told, look,
3 you're going to work on banded paper for this reduced
4 ignition propensity cigarette, were you given
5 information on prior work that had been done in that
6 field?

7 A I think some information was shared for
8 me to be able to understand the concept, and I
9 started working on the project.

10 Q Do you remember what information was
11 provided to you or shared with you?

12 A I don't exactly remember what
13 information, but the concept was explained to me that
14 if you put bands on the cigarette paper and if the
15 bands have right properties, then you can control the
16 burn rate.

17 Q And the burn rate of the cigarette was
18 what could ultimately control its ignition
19 propensity?

20 A I'm not an expert in that area so
21 that's -- that's what my understanding is.

22 Q That's what you were told?

23 A That's what I understood.

24 Q How did you have that understanding?
25 Something you read? Something someone told you?

1 A I think I may have talked to people. I
2 don't recall if I read many reports or any reports,
3 but I may have talked to people who knew the design
4 of cigarette or -- design of cigarette papers, I
5 mean. Sorry. And that's -- that's how it was
6 explained to me is if you put bands of the right
7 properties, that they control the burn rate, which,
8 if the properties are right, could reduce the
9 ignition propensity.

10 Q During the course of your work at Philip
11 Morris, did you ever deal with the issue of
12 subjective qualities of cigarettes?

13 A Can you explain subjective, meaning
14 the --

15 Q Yes. Flavor, appearance, taste, things
16 of that nature that would deal with the quality of
17 the product.

18 A And your question is during my entire
19 career at Philip Morris? Yes, I have.

20 Q Have you dealt with the issue of the
21 ignition propensity of banded papers?

22 A My role was to develop the paper, but I
23 worked with engineers and scientists who were
24 designing the cigarettes. So I was feeding the paper
25 information to them, and they were responsible for

1 designing the cigarette. And there was interaction
2 with those people.

3 Q When you first began to work with the
4 banded paper project with the Paper Technology Group,
5 who was your immediate supervisor or person that you
6 reported to?

7 A His name was Bob Rogers.

8 Q Did you work during that time with Sheryl
9 Baldwin?

10 A She was my -- I believe my second boss.

11 Q Above Mr. Rogers?

12 A Above Mr. Rogers, yes.

13 Q Okay. So it's late 1989, early 1990.
14 You've been assigned this project to work on. And
15 did you immediately have a staff that worked with you
16 or under you on the project, or was that something
17 that came about later?

18 A I had a few other folks working with me
19 on this project, yes.

20 Q Do you recall about how many?

21 A I don't recall exactly, but I would say
22 on that particular approach of banded paper, which is
23 putting bands on cigarette paper while manufacturing,
24 I would say initially there were about five to --
25 five to six folks who started working on it.

1 Q During the time you worked on the banded
2 paper project, did you ever have an occasion to work
3 with Mr. Jerry Whidby?

4 A During the entire course of --

5 Q Yes.

6 A Yes.

7 Q When did that experience begin, working
8 with Mr. Whidby?

9 A I did not work directly with Jerry
10 Whidby. He was -- he was -- he was either my boss'
11 boss at some time, or he was managing the overall
12 project at some point. So I did not work directly
13 with him. But in different capacities during the
14 last -- you know, from, I would say, early '90s to
15 '96 until I worked on this project, Jerry was
16 involved with this project, and I worked indirectly
17 with him in different ways, you know, in different
18 capacities.

19 Q In 1993 you became the project leader for
20 the Banded Paper Development; correct?

21 A That's correct. Can -- I would like to
22 explain.

23 The banded paper project had several --
24 or banded paper program had several different
25 projects under it.

1 Q Okay.

2 A One piece of it was to develop the paper,
3 and I was the leader for that.

4 Q What were the other areas under the
5 program?

6 A There was an area for developing
7 instruments or measurement techniques to measure the
8 properties, for an example was cigarette design
9 related to banded paper.

10 Q And your focus was on the development of
11 the paper?

12 A That is correct.

13 Q How did your job change in 1993 when you
14 became project leader for Banded Paper Development?

15 A Well, I -- I mean, I guess my role
16 changed that I also -- previously, I was engineer, so
17 I was designing, developing, evaluating things. And
18 then, in addition to that, I also started managing
19 certain activities of it, of the paper development
20 program.

21 Q In 1996, specifically, in July of 1996,
22 you became the manager of Filter and Paper
23 Technology. How did your job change with that change
24 in position?

25 A Beginning in July of '96, I wasn't

1 directly working on the project, but I was managing
2 the functional group that provided the manpower to
3 the banded paper project.

4 Q By that time had you, essentially, been
5 promoted to the point you were more of a manager than
6 a researcher?

7 A I would say so.

8 Q In 1998 you, again, changed positions
9 within the company to become Product Development
10 Manager over the Japan region?

11 A That is correct.

12 Q How did your job change with that change?

13 A Well, then at that point I became
14 responsible for managing the product development or
15 cigarette product development activities for a
16 particular country or region. So I was more involved
17 in the -- in the cigarette development activities.

18 Q Did your work with banded paper end at
19 that time, or did it continue in some fashion?

20 A My direct involvement ended in '96,
21 July -- or, yeah, June or July '96. I may have
22 consulted with folks later on occasionally but not
23 much.

24 Q In February of 2000 you were assigned to
25 the Philip Morris USA Task Force; correct?

1 A That is correct.

2 Q And it appears that it changed your
3 location a bit to New York City; correct?

4 A That is correct.

5 Q What -- what, in particular, was your job
6 with the Task Force?

7 A Was a confidential project, and we were
8 looking for -- we were looking for ways to fully
9 realize -- we have -- PM USA has a mission, and there
10 was a task force set up by the senior management of
11 the company to look at the ways to fully realize that
12 mission, and I was part of that task force.

13 Q Was the -- was the mission a company-wide
14 mission?

15 A It was PM USA mission.

16 Q Did the mission have anything to do with
17 or relate in any fashion to reduced ignition
18 propensity cigarettes or self-extinguishing
19 cigarettes?

20 A I mean, it does not say the word "reduced
21 ignition propensity," but if I could restate the
22 mission, it was -- and I don't remember or memorize
23 exactly the same words, but it is to be the most
24 responsible, effective and respected manufacturer of
25 tobacco products. So under that context, you could

1 say, yes.

2 Q And you served in that role on the task
3 force for about seven months; correct?

4 A That is correct.

5 Q And then you moved to a different
6 position, still in New York City, Manager of Market
7 Information Planning?

8 A Yes.

9 Q And that was a very recent move.

10 A That is -- it's still in the process of
11 moving.

12 Q About a month ago?

13 A About a month ago.

14 Q What does that new job entail?

15 A This is a group where we analyze business
16 and market information. So my role is to look at
17 some special issues related to market information,
18 related to business information, analyze it and draw
19 conclusions and present it to executive management.

20 Q Sorry. Didn't mean to interrupt you. I
21 thought you were through with your answer.

22 Is part of your work in Market
23 Information Planning to analyze market share
24 information?

25 A It would be. I'm beginning -- the role

1 is not -- it is, to some extent, yes.

2 Q Is Philip Morris' market share in the
3 cigarette manufacturing industry an important aspect
4 of its business?

5 A Yes, it is.

6 Q What sort of things affect Philip Morris'
7 market share in the cigarette manufacturing and sale
8 business?

9 (Mr. Waltman exited the room.)

10 A Well, I -- I'm not an expert in that area
11 right now because I -- it's a totally new job for me.
12 So I'm -- I'm learning about what impacts market
13 share.

14 BY MR. GRISHAM:

15 Q As you sit here today, you've been on the
16 job about a month, but you're still transitioning
17 into the position?

18 A That is correct.

19 Q Do you have some understanding of what
20 sort of things affect market share for cigarette
21 sales?

22 A I would say the product quality, the
23 brand awareness, those sort of things.

24 Q In terms of product quality, is it your
25 understanding that at Philip Morris it's important to

1 maintain a consistency year to year of its products?

2 A That is my understanding. We try to make
3 the product as consistent and of high as quality as
4 possible.

5 Q Is the consistency of the product from
6 year to year something that's important in
7 maintaining market share?

8 A I don't know. It's -- it's not clear-cut
9 it is or not.

10 Q In your experience in working for Philip
11 Morris, are changes in major brands something that
12 are brought about slowly?

13 MR. CRAMPTON: You mean changes to the
14 cigarette or changes to the market share?

15 MR. GRISHAM: Changes in the cigarette,
16 itself.

17 A On -- repeat the question again. I want
18 to understand it.

19 BY MR. GRISHAM:

20 Q In your work at Philip Morris, have you
21 noticed that changes in major brands of cigarettes
22 are brought about slowly?

23 A Depends. I would -- I mean, the changes
24 are made all the time for various reasons. So I
25 guess the answer would be, yeah, we make changes all

1 the time to the cigarettes.

2 Q Okay.

3 A Yeah.

4 Q What sort of changes are made all the
5 time?

6 A Could say we change the -- certain aspect
7 of design. We -- for many reasons of the consumer
8 preferences, we change the tar level of the
9 cigarette. That's an example of changes to the
10 cigarette.

11 Q Are changes to the type of paper or the
12 qualities of the paper used changes that are made
13 frequently?

14 A There are several grades of cigarette
15 papers that are used, and yes, sometimes the changes
16 are made -- made to the cigarette paper, too, to
17 maintain the consistency of the product.

18 (Mr. Waltman entered the room.)

19 BY MR. GRISHAM:

20 Q Is it accurate to say, then, that the
21 folks at Philip Morris are able to and are willing to
22 make changes from time to time to the cigarettes to
23 maintain their quality and, in turn, maintain market
24 share?

25 A I would say, yes, changes are made.

1 Q And those changes are made from time to
2 time to maintain consistency in the product?

3 A That's my understanding. It is --
4 changes are sometimes made to maintain the
5 consistency of the product.

6 Q Now, let me refocus your attention,
7 again, back to the 1989 time period when you first
8 were exposed to the banded paper concept, ask you
9 some questions about that.

10 First of all, did you make a patent
11 review at that time?

12 A I did -- or I'm not -- I do not remember
13 exactly if it was me who did the patent review or
14 other people who were working with me on the product,
15 but we did review the patents. And I do not remember
16 the exact date when, whether it was in '89 or '90 or
17 '91. But we have, from time to time, reviewed the
18 patents.

19 Q What was the purpose of undertaking the
20 patent review?

21 A Once again, I do not remember exactly,
22 because it was done for very many different reasons.
23 Sometimes we may have done it for looking at, okay,
24 what is out there, prior art? It may have been in
25 the context of when we were filing the applications

1 for some of the patents that we have received in the
2 area of banded paper, it may be in the context of,
3 okay, what is the prior art?

4 So for various reasons, for reviewing the
5 technology, for reviewing the prior art before filing
6 the patent application.

7 Q During the 1989, 1990 to 1992 time
8 period, did you review any test data with regard to
9 banded papers?

10 A What do you mean by "test data"?

11 Q Any data that existed with regard to the
12 performance of cigarette papers with bands attached.

13 A Performance of the paper? Yes.

14 Q What sort of data was that?

15 A Many different things. It could have
16 been the permeability of the cigarette paper, could
17 have been the optical properties of cigarette papers,
18 things of that sort.

19 Q In 1989 when you began working on the
20 banded paper project, were there various types of
21 paper that were available that you could get your
22 hands on that had very low porosity?

23 A What do you mean by "low porosity"?

24 Q Okay. Let me do it like this.

25 Was there a range of paper porosity

1 available in paper that was available to you in 1989
2 to study?

3 A Yes.

4 Q What were the ranges?

5 A I do not remember exactly, but I would
6 say cigarette paper industry produces paper anywhere
7 from, my understanding is, from 10 Coresta to -- and
8 higher up.

9 Q What would be the highest range that you
10 believe was available in 1989?

11 A Typically, the high Coresta was about 45
12 to 50, but there may have been some manufacturers who
13 were producing even higher Coresta papers.

14 Q Do you know of any technological
15 impediments to producing higher Coresta papers at
16 that time?

17 A No, I don't know. But the -- it is -- my
18 understanding, it is the quality and the consistency
19 and the control of the paper property is difficult as
20 you go higher and higher up.

21 Q The porosity gets higher, and so,
22 therefore, it's --

23 A -- it's difficult to control the quality
24 of the paper, is my understanding.

25 Q And in the 1989 to 1992 time period, did

1 you consult with individuals outside of Philip Morris
2 with regard to your job in developing a banded paper
3 application technique?

4 A Yes.

5 Q Who did you consult with?

6 A We worked with a professor at the
7 University of Maine, which is a university where
8 there is a paper technology curriculum. And they
9 have what is called the pilot plants and the
10 laboratories that support the paper technology type
11 work. So we worked with the University of Maine.

12 Q Was there a particular individual there
13 that was the primary contact person?

14 A Yes. There were a couple of folks. The
15 people changed from -- during the years. Initially
16 work with Dr. David Kraske. He was the chairman of
17 the Department of Paper Science Engineering.

18 Q Can you spell that?

19 A David Kraske, K-R-A-S-K-E, I think.

20 Q Okay. And the other one was?

21 A Then I think Dr. Kraske retired, and
22 another person came in in his place. His name was,
23 if I recall correctly, Dr. Genco. And I -- I think
24 it's either G-E-N-C-O -- but he was also chairman of
25 the department.

1 Q Besides the University of Maine, did you
2 consult with any other entities or persons,
3 university, companies?

4 A We worked with other organizations or
5 companies to develop this technology.

6 Q What other companies?

7 A Beloit is a company that manufactures --
8 or that makes the paper machinery equipment. So we
9 worked with them briefly. There was a local firm in
10 Richmond that we worked with also.

11 Q And their name?

12 A The name was either Bryce Jewett or
13 Jewett Automation, J-W-E-T-T -- or J-E-W-E-T-T.

14 Q Did you work with any other entities,
15 Kimberly Clark or Schweitzer or Ecusta?

16 A Well, Kimberly Clark was our supplier of
17 cigarette paper. So as I said, we did not work on
18 this particular project with them until late '92,
19 early '93.

20 Q At the time that you first were working
21 on the project in late '89 or early '90, did you
22 become aware of any other companies that were doing
23 similar research?

24 A Not that I recall.

25 Q And by that I was including companies

1 that may not be in cigarette manufacturing, per se,
2 but other paper companies.

3 A No, not that I recall.

4 Q When you first began to work on the
5 banded paper project, besides initiating a patent
6 review at some time during the first two to three
7 years, did you do anything else to figure out what
8 the state of the research was at that point?

9 A Well, let me first say that I -- I do not
10 exactly remember whether I initiated the patent
11 review. But, yes, we did review the patents.

12 Yes, before or during the course of the
13 project we always looked at, you know, what are the
14 ways to make the paper, banded paper. So, yes, I
15 mean, we looked at what is done.

16 Q How did you do that? I mean, I would
17 understand -- I do understand looking at the patents
18 that might be available. What else did you do to
19 find out what else was being done?

20 A You mean -- what do you mean? What's
21 being done where?

22 Q Whatever you may have looked at to see
23 what was being done anywhere.

24 A Well, we may have looked at what are
25 other ways to make banded paper, say, for example.

1 We were looking at putting bands on cigarette paper
2 when you're manufacturing the cigarette paper, in one
3 step. There are other -- potentially other ways to
4 make banded paper. One could print it. So we looked
5 at, okay, what is -- is the printing method. How
6 could we do the printing of bands?

7 So we looked at those type of things from
8 time to time.

9 Q By looking at them did you go and
10 research or look at other methods in other industries
11 that might be applicable in your industry in applying
12 bands to cigarette paper?

13 A I do not recall if we looked specifically
14 at other industries if there's a way to make banded
15 paper, but we did explore ways to make banded papers.

16 I mean, and this is as a paper
17 technologist. You know, what I knew were people in
18 the paper industry would say is the purpose of the
19 whole paper technology is to make the paper
20 consistent, and here we were making paper uniformly
21 inconsistent by putting bands, because paper changes
22 from time to time.

23 So we may have looked at outside, you
24 know, by talking to people like Dr. David Kraske, by
25 working with Beloit Corporation that, okay, what are

1 the other ways to make banded papers? In that
2 context we did look around, you know, what are the
3 best ways to make banded papers.

4 Q At the time you first were assigned the
5 project in late '89 or early 1990, do you recall what
6 different methods were available at that time to make
7 banded paper?

8 A Well, the one that -- that is as a
9 technology was available was printing.

10 Q Okay.

11 A So printing technology has been around.
12 But other than that, I did not know if there was
13 other ways to make banded papers.

14 Now, reviewing the patent literature
15 there were some approaches that were talked about.

16 Q Strip application being an approach?

17 A Yes, things of that nature that you could
18 stick a band on the cigarette paper, things like
19 that.

20 Q Besides the printing method and the
21 methods of applying or sticking a band to paper, do
22 you recall any other technologies in that 1989 to
23 1992 time period that you encountered?

24 A For banded paper, you mean?

25 Q Yes.

1 A I'm not sure. I don't know what the
2 exact time frame was, but I do recall vaguely there
3 was a patent which talked about what is called
4 calendaring the cigarette paper or -- which is like
5 compressing the paper to change the porosity in
6 certain zones of cigarette paper. So I did come
7 across that type of work.

8 Q Was that technique done via a roller?

9 A Yes. It's like compressing the paper
10 between two rollers or a series of rollers.

11 Q But hope was to change the porosity at
12 the area of the compression?

13 A Yes. That's what my understanding is.

14 Q At the time you first began to work on
15 the banded paper project, did you seize upon one
16 method that you or that your group chose to focus on
17 and try to advance as opposed to others?

18 A When I started working on banded papers,
19 we looked at many different ways. Printing was also
20 ways to make banded papers, and I was involved in
21 that at different times. We looked at the banded
22 paper during the manufacturing. So we did look at
23 some other approaches to make banded papers.

24 I would like to take a break.

25 (Recess.)

1 BY MR. GRISHAM:

2 Q Mr. Gautam, and, again, for the moment,
3 restricting our attention to the time period 1989 to
4 1992, I'd like to talk about what methods were
5 available that you learned of during that time period
6 for banding cigarette papers.

7 MR. CRAMPTON: And by "available," you
8 mean -- you don't necessarily mean commercially
9 available for use in cigarettes or --

10 MR. GRISHAM: I was really thinking
11 across the board, maybe commercially available, maybe
12 not, just whatever the entire universe of available
13 techniques were during that time period.

14 A I would say we were researching two, two
15 methods.

16 BY MR. GRISHAM:

17 Q Okay. What were those?

18 A Printing some type of material on
19 cigarette papers, and then applying some kind of
20 material on cigarette papers when you're
21 manufacturing it.

22 Q Okay. Really, the first category would
23 be a printing category, and the second would be some
24 sort of strip application?

25 A No, second would be paper manufacturing.

1 So when you make the paper, just apply something
2 right there.

3 Q And that's distinguishable from a
4 printing technique?

5 A That is. Printing is, to me, is after
6 you have made the paper, that you take it some other
7 place or some other equipment and apply something on
8 it.

9 Q So that would be on the dry end of the
10 manufacturing of the paper?

11 A Either dry end or after the paper is
12 dried totally take it off-site somewhere and print
13 bands.

14 Q All right. With regard to printing
15 techniques that were being researched at that time,
16 what types were being researched and evaluated?

17 A The one that I was involved with was what
18 is called gravure printing.

19 Q Can you describe that process?

20 A Or an adaptation of gravure printing.

21 Gravure printing is that you put some
22 holes or etch some holes in the cylinder, itself, and
23 then you fill those holes with the material that
24 you're trying to print. And then when cylinder comes
25 in contact with the paper, the material is

1 transferred to the paper. And after application
2 through that cylinder, which is in direct contact
3 with paper, then you dry the material off.
4 That's what is typically called gravure
5 printing.

6 Q And that is -- the gravure printing
7 technique is something that's been around for some
8 time; correct?

9 A Yes, I think.

10 Q And is that the type of technique that
11 was used to emboss designs on cigarette paper?

12 A Emboss?

13 Q Yes. Let me think of another word that
14 might better describe that.

15 The designs, sometimes, that are put on
16 cigarette paper is --

17 A I don't -- I don't understand design.

18 MR. CRAMPTON: You talking about words
19 written on the paper or --

20 MR. GRISHAM: Yeah, or the designs.

21 Really, I was thinking about the designs.

22 MR. CRAMPTON: But something like with
23 ink?

24 MR. GRISHAM: Yeah.

25 A Ink is -- could be something like that,

1 yeah.

2 BY MR. GRISHAM:

3 Q Okay. What other uses did gravure
4 printing have in the cigarette industry at that time?

5 A Gravure printing is used for printing the
6 brand logos, et cetera, on the cigarette paper using
7 inks. It may or may not. I don't know. I wasn't --
8 it may have been used in other places, like on
9 printing the other packaging materials.

10 Q During the time period of 1989 through
11 1992, what -- what other techniques besides gravure
12 printing was -- were being explored or researched or
13 investigated under the category of print techniques
14 for applying bands of material?

15 A Well, I mean, we were taking -- what we
16 were also looking, in addition to traditional gravure
17 printing method, was taking the gravure process and
18 make some modifications to it so that we are able to
19 print the materials on cigarette papers.

20 So, for example, we may have made some
21 changes to the design of the cylinder that is used
22 for gravure printing to make.

23 Q What type of materials did you hope to be
24 able to apply through gravure printing?

25 A We looked at a wide variety of materials.

1 Cellulosic materials were primary interest.

2 Q Was Avicel a cellulosic material that was
3 investigated?

4 A Yes.

5 Q Is Avicel a technical name or a brand
6 name or a design name?

7 A Avicel, my understanding is, was a brand
8 name.

9 Q Who manufactured Avicel?

10 A I believe it was a company called FMC.

11 Q What work was required in order to modify
12 the traditional gravure printing machinery to
13 accommodate that cellulosic material that you
14 described?

15 A Is the question what was involved or what
16 was required?

17 Q Yes.

18 A The cellulosic materials require a little
19 bigger, for lack of better word, holes, because size
20 wise they're bigger. So -- and they're not solution,
21 okay, so it's difficult to print those materials. So
22 it require changes to the cylinder to make the holes
23 bigger so you could transfer the cellulosic or
24 powderous type material.

25 Q Was the cellulosic material better

1 described as a suspension rather than a solution?

2 A Yes, I would -- that's a better
3 characterization, or a slurry.

4 Q Okay. Were, in fact, gravure printing
5 machineries that were used in that process modified
6 to accommodate cellulosic slurry for application to
7 papers during that time period of 1989 to 1992?

8 A Say it again one more time. I did not
9 fully understand the question.

10 Q That's okay. Thank you for pointing that
11 out.

12 During that time period of 1989 through
13 1992 when you were involved in the Paper Technology
14 Group, did you observe any traditional gravure
15 equipment modified to accommodate this cellulosic
16 slurry that you described?

17 A As I said before, we were researching or
18 exploring ways to be able to print cellulosic or
19 slurry type materials on cigarette paper, which is
20 very difficult to do. So we did try a few things,
21 taking the concept of gravure and then modifying it
22 and see if we can be successful in printing it. So
23 we did try a few, yes.

24 Q And what methods did you try?

25 A One of the method was that, instead of

1 having the etches -- "etches" is the term that is
2 used in the gravure printing, very tiny holes in the
3 cylinder. One thing that we tried was to put a
4 bigger groove into the cylinder, and that way we
5 thought we could hold more slurry into the groove.
6 And then when paper comes in contact, we could
7 transfer it. So we did try that method.

8 Q Any other methods that were investigated?

9 A I think that's -- that's what I recall
10 mostly. That's where our focus was.

11 Q Was -- was one advantage of gravure
12 printing as a technique that it could be done at
13 commercial speeds?

14 A I'm not sure. I think the premise of
15 your question is what I'm not sure about. Is for
16 cigarette papers, I'm not sure whether it could be
17 done.

18 Q Okay. The technique of gravure printing
19 was used in a commercial sense in applying the brand
20 names at commercial speeds; correct?

21 A For other types of papers it could be
22 done at many different speeds, yes.

23 Q By "other types of papers," what are you
24 referring to?

25 A Any, you know, printing paper, any type

1 of writing grades of papers or any other type of
2 papers. The commercial -- the gravure process is a
3 widely accepted and widely used process, so it is
4 done at many different speeds. For cigarette paper,
5 I wasn't aware if it was done anywhere.

6 Q At that time how were -- how were words
7 printed on cigarette papers, words or designs?

8 A The -- I don't recall that we print
9 anything on cigarette paper, other than on some
10 cigarettes we print with ink the brand name on some
11 cigarettes. And my understanding, that is done at
12 the cigarette manufacturing machine, itself.

13 Q Okay. And that was probably done with
14 what, inkjet printing techniques?

15 A I really don't know much about that area.

16 Q Was the modification of the gravure
17 printing technique that you've described where the
18 cylinder was changed to create a bigger area to,
19 hopefully, accept this cellulosic material, was that
20 a successful method of applying cellulosic bands to
21 paper during the time that you researched that?

22 A We had many, many, many difficulties in
23 applying through that process.

24 Q Ultimately, was it successfully
25 accomplished, though?

1 A We were not able to remove all of the
2 difficulties through that method.

3 Q I understand that there may have been
4 some difficulties that remained, and we'll talk about
5 those. But all that aside, even with difficulties,
6 were you able to technologically do that; that is,
7 apply the cellulose through a printing technique?

8 (Mr. Waltman exited the room.)

9 A On the lab scale we were.

10 BY MR. GRISHAM:

11 Q Okay.

12 A We were able to do it on a pilot scale
13 also, a little bit higher than lab scale.

14 So, yes, I mean, we were able to produce
15 some paper with gravure -- that modified gravure type
16 process, but only for experimental purpose, not -- in
17 very small quantities, say, for example, and not
18 without difficulties or problems and not with enough
19 control, also.

20 Q Sorry. I didn't mean to interrupt you.
21 What were you saying?

22 A Not with enough control.

23 Q So you were able to, through the gravure
24 method, to create papers in the laboratory and even
25 at the pilot scale but not higher?

1 A Well, you asked me during the time frame
2 of '89 to '92.
3 Q Good point. Good point.
4 A Yes.
5 Q And let's stick with that for a moment.
6 Just so that we will know, there's the
7 laboratory area where you may experiment with some
8 sort of paper technology, and the pilot scale, is
9 that actually where there is a limited application of
10 the technology you learned in the lab, only at
11 machine speeds?
12 A Pilot scale is -- what we call pilot
13 scale, is the modified gravure, in our case, was
14 running sort of continuously, like a much, much, much
15 slower speed and much smaller in size. But it was
16 running continuously for some longer period of time
17 than, when you do it in the lab scale, you do it like
18 off-line. Okay? "Off-line" meaning that you will do
19 something with the hand, like apply coated band.
20 So pilot scale is sort of continuous but
21 very small scale and very slow speeds.
22 Q What is the next scale up from pilot
23 scale?
24 A Is to do trials on a commercial type
25 machine.

1 Q Would that be full-scale trials?

2 A It could be full-scale trials.

3 Q Now, after the 1989 to 1992 time period,
4 were there developments made that allowed the gravure
5 printing technique to successfully be used to apply
6 cellulosic materials to the paper?

7 A Well, at that point we -- by the end of
8 '92, we still had problems with the gravure type
9 printing.

10 Q Okay.

11 A We were not able to remove all of the
12 problems associated with the gravure printing, but we
13 did take it to the next step of printing it on a
14 bigger machine which ran at higher speed, which
15 actually, you know -- so we did try it on a
16 full-scale machine.

17 Q Were those trials done at Beloit?

18 A No. Those -- at that time we were
19 working with Kimberly Clark.

20 Q Okay. So the gravure method was taken to
21 Kimberly Clark for some full-scale trials?

22 A That is correct.

23 (Mr. Waltman entered the room.)

24 BY MR. GRISHAM:

25 Q About when was that done?

1 A I think it was in '93 or '94.

2 Q Were those full-scale trials successful
3 in creating a banded paper product?

4 A Well, we were able to produce larger
5 quantity of banded paper, but we still had some
6 problems.

7 Q What were the problems at that time?

8 A The control of the properties of paper
9 and the physical appearance of the papers, the
10 runability of the machine on which we were running
11 these trials. Those were some of the major issues.

12 Q Okay. The properties of the bands were a
13 problem? Was the cellulose in the material settling
14 out before it could be applied?

15 A The problem -- the control problems were
16 that we -- when you apply certain things on cigarette
17 papers and you want to control the property, such as
18 porosity, you need to apply the material very
19 uniformly. And that's what the issue was, that we
20 were not able to apply it very uniformly.

21 Q Why was that? Was it ever determined why
22 it couldn't be applied uniformly?

23 A My opinion and our opinion, I would say,
24 if I could say collectively, was that that process
25 and the material that we used to apply using that

1 process does not lend itself to be uniformly applied.

2 Q Okay. What were the runability problems?

3 A The paper would break a lot.

4 Q Was that because of the quality of the

5 base paper, itself?

6 A No. I think it was because of the

7 combination of the slurry that we were trying to

8 apply using gravure process on cigarette paper, which

9 is not a very strong paper to begin with.

10 Q Would the gravure process be best

11 described as a dry end process?

12 A I think.

13 Q Okay. Let's back up just a second and,

14 if you can, for us, describe what the difference is

15 between wet end and dry end in cigarette papermaking.

16 A In cigarette papermaking, the wet end

17 is -- you start with a suspension of cellulosic

18 fibers and some other materials and very high amount

19 of water, and you sort of dump that slurry suspension

20 on a moving screen where the water is drained.

21 So that piece is called the wet end, and

22 it's called wet end because at that point there's a

23 lot of water before paper is formed.

24 And then paper mat is formed, and slurry

25 passes through various stages of paper machine, such

1 as pressing and then drying. So slowly the water is
2 removed from the paper. And as it moves towards the
3 less and less moisture, towards the dry end, it is
4 called the dry end.

5 Q Okay. Were gravure printing methods ever
6 investigated with other outside vendors other than
7 Kimberly Clark?

8 A As I said, the modification of the
9 gravure process, we did try it with Beloit also.

10 Q When was that attempted?

11 A I believe it was in '91 and '92.

12 Q Was -- was that attempt successful?

13 A No.

14 Q Why not?

15 A Well, with Beloit, we were trying the
16 modified gravure process at the wet end of the paper
17 machine. So we thought we could take the slurry or
18 suspension of cellulose and apply at the wet end
19 using the modified gravure process. And it wasn't
20 successful in the sense that we were not able to make
21 paper.

22 Q Okay. It was not too successful, as the
23 dry end application had been?

24 A At the wet end it just did not work. At
25 the dry end we were able to produce some paper, but

1 there were still a lot of problems.
2 Q Okay. Were the problems with the
3 modified gravure printing method ever worked out
4 where the method could be used to produce paper?
5 A You mean produce paper in what sense?
6 Q That could be used.
7 A That could be used --
8 Q -- in a cigarette-making machine to make
9 cigarettes?
10 A What do you mean "used"?
11 Q Yeah. You mentioned that --
12 A Small quantities?
13 Q Any quantity.
14 A Yes. I mean, we made enough paper that
15 we could make bobbins and then take those bobbins and
16 make cigarettes on a cigarette maker. But the
17 quality of that paper and the bobbins was not that we
18 could use it in a commercial manner.
19 Q Okay. And the quality problems were what
20 you mentioned before, the quality of the band,
21 itself?
22 A Yes.
23 Q The spotting?
24 A The uniformity of the band, the wrinkle
25 and physical nature of the paper that wasn't as

1 smooth as you would see. So there were a lot of
2 wrinkles created by the application.

3 Q Okay.

4 A So those were some of the quality issues.
5 And then in addition to that, as I
6 mentioned before, there was runability problems while
7 making the modified gravure paper, gravure banded
8 paper.

9 Q And I probably misunderstood. Were the
10 runability problems during the papermaking process or
11 later on in the cigarette rolling machines?

12 A What I described earlier was the --
13 during the gravure printing process or the
14 papermaking process.

15 Q Okay. And that was the breaking of the
16 paper with --

17 A Breaking of the paper, yes, sir.

18 Q But even with those problems, there were
19 bobbins of banded paper made with the gravure method
20 that later cigarettes were wrapped?

21 A That is correct.

22 Q What would you call that basis? Is that
23 a pilot scale?

24 A Experimental basis.

25 Q Were any of those cigarettes made with

1 the modified gravure printing method ever used in
2 ignition testing?

3 A Yes. I think the cigarettes were made
4 and -- though, I wasn't involved in the testing. But
5 I'm sure testing was done.

6 Q Do you know when that testing would have
7 been conducted?

8 A On -- you have to explain. Which --
9 which process? Which paper and --

10 Q Okay. Do you know about when the
11 ignition testing would have been done on the modified
12 gravure printing method paper?

13 A I think -- I don't recall exactly, but it
14 was '93, '94, even 9- -- well, '94 is when we --

15 Q Other than the modified gravure printing
16 method, were there other printing methods looked at
17 or examined or experimented with during the period of
18 1989 to 1992?

19 A Not that I recall or something that I was
20 involved in.

21 Q During that time period, though, you'd
22 mentioned there were other techniques examined during
23 the manufacturing process of the paper. What were
24 those?

25 A Say it again? The other manufacturing

1 techniques to make banded papers?

2 Q Yes.

3 A The other technique, as I mentioned, was
4 to apply bands when you're making the paper, so apply
5 the slurry at the wet end of the paper machine.

6 Q Okay. So you were referring to -- I
7 thought that was another printing method.

8 A No, that's -- that's what we call the wet
9 end application. And the gravure printing, modified
10 gravure, is a dry end process.

11 Q Got you.

12 A That's the way to differentiate.

13 Q Okay. How was the wet end application
14 performed?

15 A Well, we had difficulties with wet end
16 process because that's also very difficult. It
17 creates runability problems, control problems. We
18 tried several different application methods for the
19 wet end application but eventually -- I mean, that is
20 the process that we're using now on the banded paper
21 that we're producing cigarettes with.

22 Q That's the PaperSelect paper?

23 A That is correct.

24 Q So the PaperSelect really is a wet end
25 application?

1 A That is correct.

2 Q Back in the 1989 to 1992 time period,
3 what methods of wet end application were being
4 researched?

5 A Well, the concept was to apply the slurry
6 of some sort of different materials at the wet end.
7 The work that we were doing was, okay, what is the
8 best equipment or method to apply it? So we worked
9 initially with something -- equipment we named as
10 daubing dandy.

11 Q Right.

12 A D-A-U-B-I-N-G, daubing dandy. And after
13 that, we looked at the other technique, which is
14 called moving orifice device, which is what we're
15 using now.

16 Q Okay. How did the daubing dandy purport
17 to work?

18 A You mean how it worked?

19 Q Yes.

20 A You want me describe it?

21 Q Please.

22 A Basically, had a cylinder which -- it's
23 hard to describe without a drawing. But there was a
24 stationary chamber which housed the slurry. And at
25 the bottom of that stationary chamber was a groove.

1 Outside of that stationary chamber was a rotating
2 drum which had slits across, okay, intermittently,
3 like bands. So whenever those slits lined up with
4 the groove on the stationary chamber, the slurry came
5 out, and it was applied on the paper.

6 Q Were there any difficulties in using that
7 technique?

8 A Yes, there were.

9 Q What were the difficulties?

10 A Once again, the control of the slurry
11 application. The amount of slurry we wanted to apply
12 wasn't necessarily very controllable. The runability
13 was a big issue. The quality of paper appearance
14 wise was a big issue. We had wrinkles and all sorts
15 of things. And we only tried that concept at a pilot
16 level. So we were experiencing all of these
17 problems, even at the pilot scale where the machine
18 was very small and speeds were very slow.

19 Q Where were those pilot trials conducted?

20 A At the University of Maine.

21 Q Was the daubing dandy a technology that
22 was used in other aspects of manufacturing, or was it
23 designed specifically for this application?

24 A What do you mean by "other aspects of
25 manufacturing"?

1 Q Was it used in some other aspect of
2 manufacturing? Did it exist before these trials were
3 conducted at the University of Maine?

4 A As far as I know, I think it was sort of
5 our creation; that we put together some crude
6 equipment to test the concept that can we apply a
7 slurry at the wet end of the paper machine?

8 Q We're going to talk about the moving
9 orifice device more fully in a moment, but I want to
10 make sure we've discussed all the other methods that
11 were examined or researched.

12 Were there any other methods that you
13 were familiar with, besides calendaring, that was
14 researched or investigated?

15 A We may have looked at -- we did look at
16 some other method on a lab scale, very briefly. I
17 think inkjet printing type approach was another thing
18 that we tried with certain materials. Wasn't very
19 successful because we could never squirt out a
20 cellulosic or fibrous slurry out of inkjets, which is
21 a very tiny hole or orifice.

22 We did try one other method called wet
23 pressing. So when the paper is being formed and it
24 is still wet, if we press it enough, we -- we could
25 reduce porosity to some extent. But the amount of

1 pressure required to reduce the porosity is so high,
2 we thought it wouldn't be successful so we aborted
3 our attempts for that. But we did try the wet
4 pressing and automation inkjet.

5 Q Any others that you can think of that
6 were investigated?

7 A Not that I recall.

8 Q Was the wet pressing a form of
9 calendaring?

10 A It is a form of calendaring, is also a
11 form of compressing. And wet pressing is also, but
12 it is used differently.

13 Pressing in paper industry is at the wet
14 end, and calendaring is at the dry end. But, yes,
15 conceptually, they are both compression.

16 Q Another method that was looked at was
17 removing the filler from the base sheet. Do you
18 recall investigating that? That may have been in
19 another area, someone else's area.

20 A I do recall the concept, but I do not
21 remember if we did any significant work on that area
22 or any work at all. I don't know. The idea there
23 was to remove enough material from the cigarette
24 paper so it becomes tight.

25 Q Okay. Let's talk about the moving

1 orifice device for a moment. And you've mentioned
2 that, ultimately, the moving orifice device was the
3 technology that was developed and is being used today
4 to make banded paper for the Merit line of
5 cigarettes.

6 A That is correct.

7 Q When did the concept of the moving
8 orifice device as a means to apply bands to paper
9 first arise?

10 A I think -- I think it was either in '91
11 or '92, most likely '91.

12 Q Who came up with the idea?

13 A I think it was a joint idea between
14 Philip Morris engineers, and we were working with one
15 of the engineering firms which I mentioned. I do not
16 recall whether it was Bryce Jewett or Jewett
17 Automation at that time, but it was together. So the
18 patent is in the name of Philip Morris. And the
19 individual who worked with us on that concept is also
20 named on that -- on the patent.

21 Q Is that a patent that you're also named
22 as a coinventor on?

23 A Not on that original moving orifice
24 patent.

25 Q Do you recall who the inventors were on

1 that patent?

2 A I do not know all of the inventors.

3 Q Can you give me any names of them?

4 A I think there was an engineer at Philip
5 Morris, his name was Howard Vogt, V-O-G-T.

6 Q Okay. Any others that you can recall?

7 A I think he probably was one of the person
8 that was involved in that.

9 Q Now, if you would, take a moment to tell
10 us how the moving orifice device worked in its early
11 stages.

12 A Okay. In that concept there's a --
13 there's a belt, a steel belt, which has holes punched
14 every 1 inch or 2 inch, depending on how closely the
15 bands you want on the cigarette paper. So the holes
16 are punched on a steel belt. That steel belt goes
17 through a stationary chamber which houses the slurry,
18 and that chamber is very likely pressurized. So when
19 the holes go through the chamber, the orifice -- or
20 the slurry comes out through the holes. Okay? And
21 that's how it becomes a band.

22 But the holes are continuously moving.
23 Okay? So if the paper is running in one direction
24 and we want the bands to be perpendicular to
25 cigarette paper, we could create continuous

1 application of a band through that orifice which is
2 continuously moving through the stationary chamber.
3 And if we apply at a certain angle and maintain the
4 speed relative to the cigarette paper, we could make
5 perpendicular bands.

6 Q So, basically, you have a web of base
7 sheet moving along a conveyer belt, and on top of
8 that you have an angle set, this moving orifice
9 device, that's continually moving the belt through
10 the slurry?

11 A That is correct.

12 Q And if you regulate the speed of the two,
13 you can apply the bands at whatever intervals you
14 desire?

15 A That is -- well, I won't say whatever
16 interval. But, yes, you could apply bands at the
17 intervals that we were looking for, at least.

18 Q Okay.

19 A Yes.

20 Q Now, it's your belief that that device
21 was first patented by a gentleman or, perhaps, a
22 group at Philip Morris in conjunction with some
23 people with Jewett here in Richmond?

24 A Yes.

25 Q Are you aware of any other application

1 that a similar device has been used in other
2 industries?

3 A I'm not.

4 Q What happened in the developmental
5 process from the time that the moving orifice device
6 was conceived up until the year 2000 when it was used
7 to make commercial quantities of cigarette paper that
8 could be used on commercial cigarette-making
9 machines?

10 A Okay. So the -- either in late '91 or
11 early '92, I think -- I think it was most likely '91,
12 we made the first moving orifice device, which was
13 small scale. It was only -- it would only produce a
14 paper which would be 30 inches wide, and it was only
15 done at a certain speed. It wasn't very
16 sophisticated in terms of its control systems and
17 things like that. It was just a concept.

18 So -- you want me to describe the whole
19 process from '91 through 2000?

20 Q Yes. Exactly.

21 A Okay. So, first, that -- that equipment,
22 the smaller scale equipment, was fabricated by Jewett
23 for us. The first thing we did was, after trying
24 it -- just the equipment initially, without any paper
25 underneath it, just to see how the jet comes out of

1 that orifice, we first took it to Beloit on a pilot
2 paper machine, and we put that equipment on top of
3 the paper machine at Beloit. And we tried it there
4 in '91 and '92. Okay? So we did several trials at
5 Beloit.

6 At that time what we were looking for was
7 can we consistently, number one, apply the bands? If
8 we apply bands, can we apply enough quantity? And
9 can we control it? And can we -- even if we can
10 apply it correctly, can we run the paper through the
11 paper machine? And even if we were able to run it,
12 is the paper of good quality?

13 So we did all of those experiments at
14 Beloit, first, and some at Philip Morris without any
15 paper beneath it, because we do not have a paper
16 machine.

17 Though we had a lot of problems, like
18 with regard to all of those issues I mentioned,
19 control of the properties of paper, the quality of
20 the paper, the runability -- we had issues with all
21 of those, but we thought there were enough positive
22 things in the technology that we needed to take it to
23 the next logical step, which was that we signed a
24 joint development agreement with our paper supplier,
25 cigarette paper supplier, Kimberly Clark, at that

1 time, which later changed to Schweitzer Mauduit.

2 So I think in late '92 we signed that
3 joint development agreement. And beginning of '93,
4 we started working with Kimberly Clark. So we took
5 that pilot moving orifice device or small-scale
6 moving orifice device, we took it to Kimberly Clark
7 at the Spotswood plant, and we started playing with
8 that device on their paper machines. Cigarette paper
9 machines are like 12 feet wide, and we had this
10 device which was only 30 inch wide.

11 So we start conducting experiments with
12 regard to can we run at the speed these cigarette
13 paper machines run? Can we apply the materials that
14 we want to apply? Can we make enough good quality
15 paper?

16 So during '93 and early part of '94, we
17 did those pilot scale MOD equipment -- moving orifice
18 device is what we refer to as MOD -- experiments.
19 And then I think it was in '94 -- or sometime in '94
20 we made a decision that we needed to take this
21 concept and put together a full-scale moving orifice
22 device. "Full scale" meaning something that would
23 cover the entire width of the paper machine at
24 Kimberly Clark's plant where they made actual
25 cigarette papers, commercial cigarette papers.

1 So once we did that, it was a massive
2 undertaking. The paper machines are very large
3 equipment. It takes a lot of time, a lot of money,
4 dollars, to make that kind of equipment.

5 So we made the decision in '94, and in
6 '95, middle of '95, we installed that full-scale
7 moving orifice equipment on the cigarette paper
8 machine with all of the supporting equipment.
9 Because not just the moving orifice equipment that is
10 needed to produce a good paper, banded cigarette
11 paper. There's a separate process for producing the
12 slurry that goes into the moving orifice, which is
13 different than the paper slurry, itself, slightly.

14 So we did that in '95. Full-scale
15 equipment was available. And after that, for next
16 few years -- I mean, I know only up to '96. After
17 '95, middle of '95, for next year or so, you know,
18 until I was involved with the project, we were
19 basically trying to improve the process, which is
20 called process improvement. Because we installed it,
21 but then we have to show that it could run day in,
22 day out. And by the middle of '96, we had only done
23 it for, you know, several hours at a stretch. I
24 think the maximum we may have run was in the order of
25 20 hours or 24 hours, something like that.

1 Now, paper is made day in, day out. So
2 we were just trying to take it step by step to the
3 next logical step.

4 Q Okay. And that is basically where the
5 process was when you exited the program and went on
6 to another area within Philip Morris?

7 A That is right.

8 Q Do you know who took over the process of
9 commercializing that -- that type of paper?

10 MR. CRAMPTON: Just object to the form.
11 And I could explain it, if you like.

12 MR. GRISHAM: Sure.

13 MR. CRAMPTON: You said took over the
14 process of commercializing it. I don't think we have
15 established that -- that Navin was in charge of
16 commercializing it.

17 BY MR. GRISHAM:

18 Q The banded paper was ultimately
19 commercialized and made into a product that was sold
20 on retail shelves; correct?

21 A I think that's what we're using on Merit
22 Select, yes.

23 Q Yes. At the time you left the program,
24 who under -- who took over the job that you had been
25 conducting?

1 A The gentleman by the name of Tony Phan.
2 Q How do you spell that?
3 A P-H-A-N.
4 Q Do you know who had responsibilities for
5 making that paper a commercial paper at Philip
6 Morris?
7 A You mean overall responsibility for the
8 project or -- I don't understand the question.
9 Q Ultimately, the banded paper that you
10 worked to develop and the device for applying the
11 banded paper became a commercial product, according
12 to what you told us a moment ago. Who -- who oversaw
13 that process?
14 A I think Ty Murray was the overall in
15 charge of the project when I left. And I was also
16 reporting to Ty Murray. He was the overall in charge
17 of the project, which included many different
18 aspects, as I mentioned before. And I think he
19 continued with it for a while. And Tony Phan
20 reported to Ty.
21 Q Leading up to the patenting of the moving
22 orifice device by Mr. Vogt and others, I take it
23 there was research done before the patent application
24 was made; correct?
25 A Research done on what?

1 Q Well, not to be trite, but Mr. Vogt and
2 the others didn't just wake up one day and run down
3 to the patent office. There was work leading up to
4 that to get the product to the point that it could be
5 patented.

6 A I'm sure, yes.

7 Q Yeah. And do you know how long that
8 process took?

9 A Well, no, I do not know.

10 Q Is there a procedure at Philip Morris
11 that one goes through once a concept is formulated to
12 get it to the stage that it can be patented?

13 A I believe there is a procedure.

14 (Discussion off the record.)

15 A I believe there is a procedure.

16 BY MR. GRISHAM:

17 Q And what is that process or procedure?

18 A I don't exactly remember the whole
19 because it's been a while. But when someone comes up
20 with a concept for an idea, the first thing we do is
21 we file with our legal department what is called
22 invention disclosure. And after filing invention
23 disclosure, then there is -- I believe there is a
24 committee of management folks and probably lawyers
25 who look at all of the invention disclosures that

1 people from all over the company file, and they say,
2 okay, which ones of these are worthwhile to patent,
3 worthwhile ideas to patent? And once that is
4 decided, the necessary background information and all
5 of the experimental data or whatever is needed to
6 support the application, the lawyers and the
7 inventors work together to put it all together and
8 then file it and then continue to work on it.

9 This is what my understanding of the
10 patent is, process is.

11 Q Who decides whether or not an invention
12 disclosure is going to be made? Is it up to the
13 inventor, or is there someone else who makes that
14 decision?

15 A My understanding, it is the senior
16 scientific technical staff at higher management
17 level.

18 Q And you have several patents that have
19 been issued with you being a coinventor; correct?

20 A That is correct.

21 Q In your experience, at least, after the
22 invention disclosure was made, did you continue
23 working on the concept while you waited on a decision
24 as to whether or not it would be something that the
25 company wanted to patent?

1 A Yes, we continued to work on it.

2 Q And the way I understand it works, by
3 virtue of your employment at Philip Morris, any
4 concept that you arrive at through your work
5 ultimately would be assigned to Philip Morris;
6 correct?

7 A Yes. That's what my understanding is,
8 yes.

9 Q Now, do you recall, when you first went
10 to work for Philip Morris, entering into a contract
11 with Philip Morris that dealt with, among other
12 things, what would happen to ideas that you formed
13 while working for Philip Morris?

14 A Do you mean did I sign any contract
15 saying that? I do not recall that.

16 Q Do you remember having a written contract
17 with Philip Morris related to your employment?

18 A I do not even recall that. I believe I
19 signed some papers, but I do not know if there was a
20 contract. I think, generally, there is a contract
21 with regard to certain things, but I do not recall in
22 my case.

23 Q Do you recall whether or not any papers
24 that you may have signed would limit your ability to
25 disclose work that you had done at Philip Morris to

1 others outside of the company?

2 A Yes, there are confidentiality agreements
3 that whenever we work with someone, we sign
4 confidentiality agreements. So yes.

5 Q Who entered into the agreement with
6 Kimberly Clark for this joint development that you
7 described?

8 A Who, you mean --

9 Q Who with Philip Morris?

10 A Who from Philip Morris?

11 Q Yes, sir.

12 A I do not know exactly who signed the
13 agreement, but it was between Philip Morris -- I
14 mean, I -- I -- I suppose it was R&D's management at
15 the time that signed the agreement with Kimberly
16 Clark.

17 Q I've seen, also, a development
18 agreement -- a joint development agreement with
19 Beloit. Do you recall that?

20 A Yes. I was -- I worked -- I mentioned I
21 worked with Beloit before and --

22 Q That's the one that had to do with the
23 modified gravure printing?

24 A Modified gravure printing and then also
25 the moving orifice device trials that we conducted at

1 Beloit.

2 Q Were those conducted simultaneously?

3 A Around the same time, yes, in '91 and
4 '92.

5 Q Do you recall there being any other
6 manufacturers that the moving orifice device was
7 tested at, like Ecusta or any of the other
8 manufacturers of paper?

9 A The moving orifice device that we
10 fabricated or manufactured?

11 Q Yes.

12 A No, we did not test it at Ecusta. I
13 don't know when, but -- I think it was in '95 or
14 '96 -- we did try it at one paper company -- one of
15 the paper companies which is still a part of
16 Schweitzer Mauduit, formerly known as Kimberly Clark,
17 called PDM in France. So we did run a trial with
18 that moving orifice device at PDM in Europe.

19 Q So there was the PDM trials and then the
20 earlier Beloit trials where the moving orifice device
21 was tried out and Kimberly Clark in the 1992 time
22 period?

23 A Yeah, '93 time period.

24 Q 1993 time period that trials were
25 conducted with the moving orifice device?

1 A That is correct.

2 Q Can you think of any other trials that
3 were conducted?

4 A With moving orifice device?

5 Q Yes.

6 A I mentioned we tried, without any paper
7 beneath it, at Philip Morris pilot plants for just
8 refining or learning about the moving orifice device,
9 itself. And we did the similar trials at Jewett to,
10 you know, properly fabricate or manufacture the
11 moving orifice device, itself.

12 Q When were those trials at Philip Morris?

13 A Those were '91, '92 time frame.

14

15 (Gautam Exhibit No. 2 was marked.)

16

17 BY MR. GRISHAM:

18 Q I'm going to hand you what's been marked
19 as Exhibit Number 2, which is a list of your
20 publications --

21 A Okay.

22 Q -- that you've brought with you here
23 today, ask you a few questions about those.

24 I notice that one of the earlier
25 publications has to do with a Kraft product?

1 A Yes.

2 Q And what product was that?

3 A Well, it's a -- you asking me to describe
4 what the paper was about, or what does Kraft mean?

5 Q You've got a better idea. Why don't we
6 go through each of those publications, just briefly,
7 and tell us what the publication was about.

8 A Okay. I'll start with the bottom one,
9 chronologically. Color Removal from Kraft Mill
10 Effluents: A Review. It was basically -- the paper
11 mills produce a lot of effluents, the water effluents
12 or liquid effluents. And because of the paper
13 process or pulp process, they're generally very brown
14 in nature, and they have a lot of chemicals. So
15 myself and some of the other authors, we reviewed the
16 methods that are, at that time, typically used to
17 remove the color from the effluent.

18 The other three publications were the
19 result of my master's of graduate thesis work.

20 Q Okay.

21 A And they were all in the area of what is
22 called paper coatings. The one called A Simple
23 Method for Measuring Immobilization Solids Using the
24 Surface Gloss Technique was a method that we
25 developed to measure the certain properties of paper

1 coatings called surface gloss.

2 Q Okay.

3 A The other one called A Comparison of the
4 Wet Coating Structure of Three Traditional Coating
5 Systems was comparing the traditional coating
6 formulations that at that time were used in paper
7 coating industry for certain grades of paper, and we
8 compared those -- the properties of those
9 formulations.

10 And the third one was trying to explain
11 certain properties of one particular formulation
12 called Clay-Latex-CMC Formulations.

13 MR. GRISHAM: Okay. Is this a good place
14 for a break?

15 MR. CRAMPTON: Sure.

16 (Recess.)

17 BY MR. GRISHAM:

18 Q Mr. Gautam, we've taken a short break.
19 And I'd like to refocus the attention to these trials
20 that were conducted over several years that we've
21 been talking about for the development of a machine
22 to apply bands to a paper.

23 Do you recall any of the tests or trials
24 or experiments being videotaped or photographed?

25 A During the entire project, yes, there

1 were some videotapes made, yes, of the process and
2 equipment.

3 Q When were those videotapes taken?

4 A Several times during the project. I do
5 not recall exactly. I'm sure there was one made on
6 the -- what I call the full scale -- several made for
7 the full-scale process in '95, '96 time frame. There
8 was some made of the small-scale moving orifice
9 device in the '93, '94 time frames. So there was --

10 Q Who would have taken those videotapes?

11 A Different people. For the full-scale
12 process, we used Kimberly Clark's -- I think they had
13 in-house audio/visual guy who took the picture.

14 When we were making the video picture of
15 the small scale, we may have done some within Philip
16 Morris just to show the moving orifice device. And
17 we may have taken some during the trials at Beloit to
18 show to -- as a part of the presentation to show how
19 it works. I do not recall exactly who took it, took
20 the video shots.

21

22 (Gautam Exhibit No. 3 was marked.)

23

24 BY MR. GRISHAM:

25 Q Mr. Gautam, I'd like to hand you what's

1 been marked as Exhibit Number 3 to your deposition.
2 Ask you to take a moment to review that document, but
3 I have some questions of you about it.
4 MR. CRAMPTON: Lynn, are you going to --
5 he can read the whole document, if you like. Are you
6 going to ask questions about the whole document?
7 MR. GRISHAM: Probably.
8 MR. CRAMPTON: Okay.
9 MR. GRISHAM: Yeah.
10 A Okay.
11 BY MR. GRISHAM:
12 Q Do you recognize Exhibit Number 3?
13 MR. CRAMPTON: Are you going to ask --
14 should he keep it?
15 MR. GRISHAM: I'll hand it back to him.
16 MR. CRAMPTON: Okay.
17 A Do I recognize this?
18 BY MR. GRISHAM:
19 Q Yes, sir.
20 A Yes.
21 Q When have you seen this document?
22 A While I was working on the project
23 back -- I don't know exactly time frame, but in early
24 '90s or -- well, not early '90s, but, you know -- I
25 don't know exact time frame, but between 1990 to '95

1 somewhere.

2 Q Between 1990 to '95?

3 A I would say.

4 Q When's the last time you saw Exhibit
5 Number 3?

6 A I do not remember.

7 Q Do you know whether or not -- strike
8 that. Let me start over.

9 How is it that you came to see Exhibit
10 Number 3 back in the 1990 to '95 time period?

11 A How did I see? Just looks familiar. It
12 may have been one of either my presentation or
13 something that I may have prepared to give it to one
14 of my bosses to present it to senior management or
15 something like this. But the -- this matter looks
16 familiar to me.

17 Q So it may have been something that you,
18 in fact, produced?

19 A It could have been.

20 Q Does it appear to you that it was part of
21 a presentation by the format?

22 A That's what it looks like to me, yes.

23 Q One of the issues that is described in
24 this document dealing with banded papers is the
25 glueability of the banded region. Is that the

1 concept of how the banded region of the paper will
2 react to the adhesion in the cigarette-making
3 process?

4 A That is right.

5 Q One of the illustrations in Exhibit
6 Number 3 is a figure of a KC Papermachine, Number 14,
7 at the Spotswood Mill?

8 A Yes.

9 Q Do you recall in what context that figure
10 was drawn? Was it something supplied to you or
11 something that Philip Morris came up with?

12 A The drawing, itself?

13 Q Yes.

14 A Can I see it?

15 Q Sure.

16 A No, I do not recall the context or even
17 whether it was something that we prepared within
18 Philip Morris or KC supplied the drawing to us. No,
19 I do not recall.

20 Q Let me look at it again, if you don't
21 mind. Thank you.

22 Now, ultimately, the commercial
23 PaperSelect that is being used today on the Merit
24 brand was manufactured at the Spotswood plant?

25 A That is correct.

1 Q In the approaches for banded paper, both
2 moving orifice and gravure printing approaches, there
3 are listed, on page 38, some advantages and
4 disadvantages. And with regard, specifically, to the
5 moving orifice device, there is both a wet end and a
6 dry end application listed?

7 A Uh-huh.

8 Q Is that what you described earlier, the
9 mechanism of attempting a wet end application and --
10 which was not very successful, and a dry end
11 application, which was more successful?

12 A For moving orifice?

13 Q Yes.

14 A No. For moving orifice device, the wet
15 end application was successful, which is what we're
16 using on PaperSelect now.

17 Q Okay.

18 A The dry end was more of a conceptual idea
19 that we could use this at the dry end also. But I
20 don't recall that we ever really tried it much.

21 Q Okay.

22 A Yeah.

23 Q Do you recall what the development costs
24 were for the moving orifice device?

25 A No, I do not recall the cost of -- of

1 which moving orifice or any. I mean, I do not know
2 the cost exactly.

3 Q Did you work with the --

4 THE DEPONENT: Can I say something?

5 MR. CRAMPTON: Is it related to a
6 question?

7 THE DEPONENT: Yeah.

8 MR. CRAMPTON: Okay.

9 THE DEPONENT: Yeah, previous question,
10 actually, that -- during the project, I could tell
11 you that, you know, the numbers were in millions, at
12 least.

13 MR. GRISHAM: Okay.

14 THE DEPONENT: Yeah. Money we spent on
15 the --

16 BY MR. GRISHAM:

17 Q Did you work at all in the area of
18 determining what the cellulosic slurry would be made
19 up of, how it would be made, manufactured?

20 A For?

21 Q For any of the -- for any of the
22 application devices, either gravure modified device
23 or the moving orifice device?

24 A Yes. We looked at a number of -- a
25 variety of different types of materials, different

1 types of fibers, different types of materials for
2 application purposes, yes.

3 Q Generally, was it considered, at the time
4 you were working on this project, more advantageous
5 to be able to apply these bands on the wet end or on
6 the dry end?

7 A Well, I mean, there are plusses and
8 minuses of both, and that's why from 1989 until 1994,
9 middle of '94, when we made the decision to scale up
10 the moving orifice device process. So from -- during
11 those five years, we were looking at many different
12 ways of producing banded papers, and there were -- we
13 found pluses and minuses of both of many different
14 alternatives.

15 Then we narrowed it down to two
16 processes, the gravure process, which was a dry end
17 process, and a moving orifice process, which was a
18 wet end process. So we narrowed it down to two
19 sometime in '92, late '92, '93. And then there were
20 pluses and minuses of both of those two.

21 And then, finally, we made a decision in
22 middle of '94 that moving orifice is the process we'd
23 like to scale up and take -- you know, scale it up
24 and see what happens.

25 Q On Exhibit 4, also, I'd like to hand you

1 a page with the Bates number, last four digits, 570,
2 which lists descriptions of the pilot evaluations in
3 1991.

4 MR. CRAMPTON: Exhibit 3?

5 MR. GRISHAM: Thank you.

6 BY MR. GRISHAM:

7 Q That is Exhibit 3?

8 A Yes.

9 Q What were the results of those
10 evaluations as stated in Exhibit 3?

11 A What do you mean the results of those
12 evaluations? In terms of --

13 Q Does the particular page in Exhibit 3
14 that you're looking at list some results of the 1991
15 trials?

16 A I think the evaluation was, at this
17 point, focused on can we apply the band on the paper
18 machine at Beloit. That's what the evaluation was.

19 Q Okay.

20 A And the result was that we were able to
21 apply.

22 Q Were there four findings or conclusions?

23 A No. These are just some of the details
24 of the evaluation. These are not the results.

25 Q Okay. What were the details of the

1 evaluation?

2 A Material used, we were -- in this
3 particular pilot evaluation or pilot -- the word
4 "evaluation" really should be like trial. So in this
5 pilot trial, we used a material called Cellulon.

6 Q Is that a bacterial cellulose?

7 A Which is a cellulose produced by a
8 bacterial process.

9 Q Okay.

10 A Application level that we were targeting,
11 I would say, was about 1 to 2 grams. The base sheet
12 on which we were applying bands was 45 gram per
13 square meter base sheet, which is not cigarette
14 paper, which is not the conventional cigarette paper.

15 Q Is it more porous?

16 A No. This one is much more heavier than
17 the cigarette paper.

18 Q Okay.

19 A The machine speed for that pilot machine
20 was 520 feet per minute. The location was -- during
21 the manufacturing there is a step in the paper
22 manufacturing called wet line. After that, the paper
23 mat appears to be forming. Before that, just looks
24 like water slurry. So the location of moving orifice
25 or band application was after the wet line.

1 So those are some of the details of the
2 trial.

3 Q Was that bacterial cellulose that was
4 used in that trial a slurry that had been available
5 for some time, or was it developed simply for that
6 trial?

7 A Well, this -- this -- we were getting
8 this material on an experimental basis from a company
9 called Weyerhaeuser. So this material wasn't produced
10 by Philip Morris. We did not have the process to
11 produce this.

12 Q What was unique about that sort of
13 cellulose?

14 A The uniqueness was it was very fine in
15 nature. "Fine" meaning it was very small in size.
16 So that was unique about it.

17 Q And that was something that Weyerhaeuser
18 developed at the request of Philip Morris?

19 A No. They -- they just developed it from
20 application many different areas in many other
21 industries. We just happened to find it, and we
22 thought let's try it and see if it works.

23 Q And was it tried because it was thought
24 that it would be easier to apply through the moving
25 orifice device?

1 A Well, that's -- that's one of the reasons
2 we tried it, yes.

3 Q And --

4 A Because so small particle size, we
5 thought it would be a suitable material.

6 Q It would be less likely to clog up the
7 orifice and so forth?

8 A Yes, one of the reasons, yes.

9 Q Is that cellulosic material what is being
10 used today on PaperSelect?

11 A No, it's not.

12 Q What's being used on PaperSelect?

13 A What is being used on PaperSelect is the
14 same fiber that we use in the cigarette papers, which
15 is called flax fiber.

16 Q Are the components of the flax fiber that
17 are being used today in the PaperSelect program, were
18 they available back in 1991?

19 A Well, the flax fiber has always been
20 available. So it wasn't the question of availability
21 of flax fiber. It was can we produce it enough? Or
22 can we produce it in such a way that we can use it
23 for application in moving orifice device?

24 Q Did you work on that aspect of the
25 project?

1 A Yes.

2 Q And what, ultimately, was done to the
3 fiber cells or other aspects of the flax paper to
4 make it usable in the moving orifice device
5 application?

6 A Well, flax fiber is a, typically, very
7 long fiber. So we had to just cut it down enough and
8 mesh it enough, you know, that it becomes more of a
9 very fine particle fiber. So --

10 Q More like the bacterial cellulose that
11 was being tried?

12 A Not necessarily, but a small and very
13 fibrillated. So when you apply it and dry it, it
14 kind of reduces the porosity.

15 So the processing of flax fiber was done,
16 I mean, to really reduce the particle size or fiber
17 size and fibrillate it. That's what the processing
18 was.

19 Q What do you mean by fibrillated?

20 A Fibrillated means that the fiber is -- it
21 could be one unique fiber. Fibrillation means that
22 you could bruise it enough that has a small hair-like
23 fibers coming out of it, and that increases the
24 surface area of the fiber. And when it is dried, it
25 kind of forms a more tighter surface.

1 Q Thus, creates a more dense area for the
2 bands?

3 A Yes, denser and tighter.

4 Q Is that process a patented process?

5 A The -- that process is mentioned as one
6 of the unique things in one of our patents. But we
7 did not develop any unique equipment processes.

8 Q In 1991, for instance, did that sort of
9 flax exist?

10 MR. CRAMPTON: You talking about
11 fibrillated or --

12 MR. GRISHAM: Yep.

13 A No. In 1991 we were not able to process
14 it to the point that we could use it in the moving
15 orifice.

16 BY MR. GRISHAM:

17 Q And why were you not able to?

18 A We just did not have enough experience at
19 that time and enough knowledge of what is required.
20 It was work in progress, and we just did not learn
21 enough to define the needs, what is really needed
22 there.

23 Q Who supplies that product for Philip
24 Morris now for the PaperSelect program?

25 A Kimberly -- we produce the paper at

1 Kimberly Clark -- or Schweitzer Mauduit now, sorry,
2 and they produce the flax fiber also.

3 Q Were employees of Kimberly Clark involved
4 in formulating this idea of shortening the fibers and
5 fibrillating them?

6 A Yes, they were also involved.

7 Q And was there involvement in the 19- --
8 in that process in the 1991, 1992 time period?

9 A No. As I mentioned before, we started
10 working with Kimberly Clark in late '92 and '93.

11 Q Okay.

12 A So after that, everything was joint
13 development with them, most of the things.

14 Q Okay. Back to Exhibit Number 3. Could I
15 see it again? I think we're about done with it.
16 Thank you.

17 (Discussion off record.)

18 BY MR. GRISHAM:

19 Q What is Cellulon?

20 A Cellulon?

21 Q Uh-huh.

22 A Cellulon, as I said before, was the brand
23 or trade -- trade name for bacterial cellulose.

24 Q Okay. That was the product that you
25 mentioned that had been in existence that you

1 experimented with in 1991 at Beloit.

2 A That is correct.

3

4 (Gautam Exhibit No. 4 was marked.)

5

6 BY MR. GRISHAM:

7 Q Hand you what's been marked as Exhibit 4
8 and ask you if you recognize that document?

9 A Yes.

10 Q What is that document?

11 A I think I do not recall the context of
12 the document, but it describes the two approaches for
13 producing banded papers, the moving orifice, or wet
14 end application, and the dry end application using
15 the gravure process.

16 Q Do you recall who authored that document?

17 A I do not recall who authored. But as it
18 mentions, there were some of us who were contributors
19 to that.

20 Q Do you recall where that would have been
21 presented to whomever the intended audience was,
22 whether at a presentation or in a publication?

23 A No, I do not. I cannot figure it out
24 from this document.

25 Q Could I look at it? Thank you.

1 It describes contributors, as you said,
2 being yourself and Ms. Baldwin and Mr. Vogt.

3 A Uh-huh.

4 Q And I'm looking specifically at the
5 subparagraph number 3 under Project Tomorrow that
6 says Conclusions. And it says, I'm quoting, Based on
7 pilot trials conducted in 1991 and subsequent work on
8 this approach, it appears that the bands of
9 cellulosic materials can be successfully applied
10 during the papermaking process at cigarette paper
11 production speeds, end quote.

12 Do you recall that being a true statement
13 or one that you've adopted?

14 A I think it refers to our trial work at
15 Beloit where we did apply bands at the speeds at
16 which cigarette paper is made. So -- can I read the
17 statement? I -- yes, I mean --

18 Q Sure.

19 A Yes, I agree with it.

20 Q When was that document created or --

21 A When was this created? I don't know. I
22 mean, it's probably sometime in either late '91 or
23 '92. I don't know.

24 Q It makes a reference on the second page
25 to a 1991 operational study.

1 A Yes.
2 Q What is being referred to on the second
3 page of Exhibit 4?
4 A With reference to what, the operational
5 plan?
6 Q Yes.
7 A It refers to -- you know, every year we
8 would make plans for the next year, you know, how
9 would we -- what are we going to do? So I think
10 that's what it refers to.
11 Q So it's making reference to the
12 operational plan for the 1991 year?
13 A That's -- that's what I guess, yes.
14 Q Okay.
15 MR. CRAMPTON: Can I see it?
16 BY MR. GRISHAM:
17 Q Do you recall having any contribution to
18 what was in the operational plan for 1991?
19 A I do not recall.
20 Q With regard to the films or photographs
21 of the equipment at any of the trials that we've
22 discussed, do you know who would have possession of
23 those?
24 A Right now? No, I do not.
25 Q If you were -- it was your task to try to

1 locate those, where would you start?

2 A I would start with Ty Murray.

3 Q Okay.

4

5 (Gautam Exhibit No. 5 was marked.)

6

7 BY MR. GRISHAM:

8 Q I want to hand you a February 21, 1991,
9 memo marked as Exhibit 5. And it refers to you as a
10 person being listed. Ask you if you can identify
11 Exhibit 5?

12 MR. CRAMPTON: Let me take a quick look
13 at it.

14 Was the handwriting on there when you got
15 it?

16 MR. GRISHAM: Yes.

17 MR. CRAMPTON: Those marks?

18 A Yes.

19 BY MR. GRISHAM:

20 Q What is that document?

21 A I think it's a notification to the
22 inventors who filed, as I was describing before, the
23 invention disclosure. It was a notification to -- to
24 those who filed the invention disclosure that this is
25 what the status is of your invention disclosure.

1 Q Basically, that was the acknowledgement
2 of an invention disclosure that you had participated
3 in filing?

4 A Yes.

5 Q What did it relate to, what particular
6 invention?

7 A Well, it reads, Paper with
8 cross-directional bands imprinted into the sheet's
9 structure at the press section of a paper machine.
10 And it was one of the -- I'll have to look at the
11 details. I do not recall exactly what it was, but
12 sounds like one of the ideas of pressing the material
13 into the paper during the pressing stage.

14 Q The wet pressing technique?

15 A Not the wet pressing. It sounds like
16 imprinting. So some -- applying -- I'll have to look
17 at the invention disclosure, itself, to tell you
18 exactly what it is.

19 Q Is there some sort of numerical reference
20 to an invention disclosure that would direct you to
21 that?

22 A Yeah. I mean, this is what it says,
23 D-768. So if you go through the legal department,
24 they would be able to figure it out.

25 Q Okay.

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(Gautam Exhibit No. 6 was marked.)

BY MR. GRISHAM:

Q I want to hand you Exhibit 6, which is a June 20, 1991, memo which you are copied on. Ask you if you can identify that?

A Yes.

Q What is that document?

A It's also a notification to the inventors or the people who filed the invention disclosure that -- that our invention disclosure was reviewed, and we will be filing the patent application on this disclosure.

Q Is that reference to the same technique that you just described that was the subject of the previous memo?

A Well, there are two different disclosures here. One of them sounds like -- and, once again, I'll have to see exactly what was in the disclosure. We filed a lot of disclosures during that time.

But this refers to -- one of them refers to the application of bands during the papermaking process, and the other one refers to application at the dry end, looks like. I'm not sure, though.

1 Q Okay.

2 A But they may have been two different ways
3 to put the material on the cigarette paper.

4 Q All right. Once again, though, there's a
5 number that should direct you to a -- to a patent --
6 or an invention disclosure document?

7 A Yes, I believe so.

8 Q And what numbers are those?

9 A D-837 and D-838.

10 Q Okay. We marked that as Exhibit 6;
11 right?

12 A That is correct.

13

14 (Gautam Exhibit No. 7 was marked.)

15

16 BY MR. GRISHAM:

17 Q Next one we're going to look at, Exhibit
18 7, is a letter dated May 17, 1991, which, again,
19 you're referenced on. Like to ask you if you can
20 identify it?

21 A Yes.

22 Q What is that document?

23 A I think it's the communication from our
24 patent lawyers to the outside firm that at that time
25 we used for filing patent application describing the

1 invention disclosure 768 that we were trying to file
2 for patent.

3 Q Do you recall which one that was?

4 A No, I do not. I'll have to look at it.

5 Q Is there a mention of other inventions or
6 prior art that needs to be included within the
7 investigation for patentability?

8 A So what's -- what are you asking?

9 Q In that memo is there some description of
10 prior art that needs to be addressed in the context
11 of that patent?

12 A Yes. That's what it reads, yes.

13 Q And what prior art or prior patents is
14 referenced?

15 A Well, one of them refers to bands of
16 high/low porosity and forming the bands by
17 perforation or embossing with a dandy roll or a
18 marker press. So that's like compressing type
19 approach.

20 The other one discloses embossing in
21 zones to decrease the porosity in the compressed
22 areas, forming grid-like pattern.

23 So, I mean, this is what is written here.

24 Q It's about the compressing methods?

25 A Yes.

1 MR. GRISHAM: We need to change tapes
2 here, if we could.

3 (Videotape changed.)

4 BY MR. GRISHAM:

5 Q Neither of those inventions related to
6 the moving orifice device, I take it, then?

7 A Which inventions are you referring to,
8 the outside ones?

9 Q Yes. Well, no, let me rephrase it. The
10 ones that were being submitted on behalf of you and
11 your coinventors.

12 A You mean the D-768? I don't know. I'll
13 have to look at it to say exactly what it is. I do
14 not recall the number.

15 Q Let's see. Our last exhibit was what,
16 Number 7?

17 A Number 7.

18

19 (Gautam Exhibit No. 8 was marked.)

20

21 BY MR. GRISHAM:

22 Q All right. We're going to look at number
23 8 now, got a few questions to ask you about that.

24 A Okay.

25 Q Do you recognize Exhibit Number 8?

1 A No, I do not.

2 Q Do you recall having seen it before
3 today?

4 A I do not recall it, no.

5 Q All right. If I could see it back, I'll
6 touch upon a couple of matters in it. If you need to
7 look at it, tell me, and I'll pass it back to you.
8 But we might not have to deal with it very much since
9 you haven't seen it before.

10 One of the statements on page Bates
11 numbered 2020021440 has a heading Products Which
12 Self-Extinguish. The objective, quote, To apply
13 cellulose bands to cigarette wrappers so that the
14 cigarette self-extinguishes when the coal reaches a
15 banded area, close quote.

16 Underneath that statement is a heading
17 that says Advantages. And the first advantage listed
18 is, quote, Minimizes changes to cigarette
19 manufacturing processes, close quote.

20 Do you agree with that statement?

21 MR. CRAMPTON: That's the whole question?

22 MR. GRISHAM: Yes.

23 A Can I -- can I see this? Your question
24 is the advantage -- one of the advantage listed here,
25 do I believe it to be the advantage?

1 BY MR. GRISHAM:

2 Q Yes.

3 A I think so.

4 Q Could I see it back? I may have another
5 question or so about that.

6 On Bates number page 2020021447 there's a
7 drawing. Ask you if you have seen that drawing
8 before or otherwise recognize it?

9 A Yes. I mean, I have seen either this one
10 or a similar. It refers to moving orifice device.

11 Q Do you know who created that drawing?

12 A I do not know who created this particular
13 drawing.

14 Q Does it accurately show what the moving
15 orifice device looked like at some point in the
16 development?

17 A Conceptually it is, yes.

18 Q Is that an early concept of the moving
19 orifice device?

20 A Yes, it is. I mean, it's -- it's still
21 the same concept. I mean, the concept has not
22 changed. But it describes the concept. It's a
23 conceptual drawing. It is not an engineering
24 drawing.

25 Q Likewise, on Bates page 2020021449

1 there's a baking industry conceptual drawing. Have
2 you seen that drawing before?

3 A I -- I don't think so.

4 Q Have you --

5 A I do not recall it.

6 Q Yeah, you can hand it back.

7 Have you recalled or do you recall today
8 having any discussions in the past with persons at
9 Philip Morris about similar moving orifice device
10 technology in other industries like the baking
11 industry?

12 A No, I do not recall any discussion
13 specifically to baking industry.

14 Q Okay. Particularly, other applications
15 of the technology that was the conceptual technology
16 of the moving orifice device, do you recall any
17 discussions with anyone at Philip Morris about other
18 technological applications?

19 A I do not recall any discussion regarding
20 any specific application of this technology, other
21 than the general discussion that potentially could be
22 used somewhere else.

23 Q Do you recall any of those discussions
24 dealing with where that technology had already been
25 used?

1 A No, I do not recall that.

2

3 (Gautam Exhibit No. 9 was marked.)

4

5 BY MR. GRISHAM:

6 Q I'm going to hand you Exhibit 9, which is
7 a memo dated December 19, 1990, and ask you if you've
8 seen that?

9 A Yes. I mean, it looks familiar.

10 Q Do you recall where you saw that memo?

11 A I was copied on it.

12 Q Okay. What does it deal with?

13 A I think this was the visit that some of
14 us made to Beloit prior to starting our developmental
15 work with them.

16 Q From looking at that memo, does that give
17 you a time frame for when the Beloit trials started?

18 A Yeah. The memo is dated in 1990, end of
19 1990, and I mentioned before we did some trial work
20 in '91 which continued through '92.

21 Q All right.

22 A We did several trials at Beloit.

23

24 (Gautam Exhibit No. 10 was marked.)

25

1 BY MR. GRISHAM:

2 Q I'm going to hand you Exhibit 10. Ask
3 you if you can tell me what that is?

4 A No, I do not know what it is. It makes
5 references to several invention disclosures, the D
6 numbers, and our patent application for one of the
7 patents.

8 MR. CRAMPTON: Is this a page from a
9 larger document?

10 MR. GRISHAM: I don't think so.

11 A PM 1479 is the code for our patent
12 application, one of the patent application, internal
13 PM code for one of the patent application. And D-680
14 and D-732 are the invention disclosure numbers.

15 BY MR. GRISHAM:

16 Q Okay. That was my next question. The D
17 numbers are invention disclosures, and the PM numbers
18 are another level?

19 A That's what my understanding is.

20 Q And is the PM number, like 1479, applied
21 to a process or a given art that is in the patent
22 process?

23 A That's what my understanding is. PM 1479
24 is for this particular patent application.

25 Q And is that a patent application that

1 ultimately resulted in a patent being issued?

2 A I think it is one of the patents that was
3 issued to us, but I'll have to double check. If I
4 could see the list of patents?

5 Q Oh, sure. I take it the PM stands for
6 Philip Morris; right?

7 A Yes, that's what I -- my understanding
8 is.

9 Yes, I think it probably refers to this
10 patent.

11 Q Which one -- can you just tell me the
12 name of the patent?

13 A The Patent Number 5,263,999 issued on
14 November 23, 1993.

15 Q All right. And that goes with PM 1479?

16 A That's what it looks like, yes.

17 Q Okay. Is there a way to cross-reference
18 these D numbers or the patent disclosure numbers to
19 the PM numbers and then, ultimately, perhaps, the
20 issued patent?

21 A Is there a way? I'm not that familiar
22 with the process. Because what happens is -- I mean,
23 I suppose there is a way. I mean this D number
24 refers to this patent application so there should be
25 a way.

1
2 (Gautam Exhibit No. 11 was marked.)

3
4 BY MR. GRISHAM:

5 Q Okay. If I could see that stack of
6 patents, I may need to mark those in just a moment.

7 In the meantime, though -- thank you --
8 like to hand you Exhibit 11, and ask you if you
9 recall seeing this document?

10 A I think, yeah, it's one of the papers
11 that we probably signed. But I'm not absolutely sure
12 when we filed the patent application.

13 Q Do you recall which patent application
14 Exhibit Number 11 relates to?

15 A No, I do not.

16 Q From review of the application -- can
17 review of that assignment tell you which patent it
18 related to?

19 A I mean, this is a blank piece of
20 agreement, assignment. It has the name, four names,
21 so I cannot say which application it was for. It has
22 four names, and I do not have -- I don't believe I
23 have any patents with these four names in it. I
24 could see three names, Sheryl Baldwin, Navin Gautam,
25 Judith Ryder, but I do not see any patents that I

1 have my name on with this fourth guy. So --

2 Q Do you recognize the fourth guy's --

3 THE DEPONENT: You see the fourth?

4 MR. CRAMPTON: No, I don't see one there.

5 A Yeah, I knew him, yeah. He was one of
6 the technicians in our group.

7 BY MR. GRISHAM:

8 Q So you don't recall any patent
9 application being made with him as a coinventor?

10 A No, I do not.

11 Q Or patent disclosure?

12 A Patent disclosure, I do not know. There
13 may have been a few, but I do not recall. But not
14 any patent granted with that person.

15 Q Does Exhibit 11 reflect the typical
16 assignment that you would have assigned -- that you
17 would have signed to Philip Morris essentially
18 selling your patent to them, your idea, concept?

19 MR. CRAMPTON: Object to form.

20 A Looks like one of the form.

21 BY MR. GRISHAM:

22 Q With regard to each patent that you
23 ultimately were issued, were each of those assigned
24 to Philip Morris?

25 A All of the patents I receive are assigned

1 to Philip Morris, yes.

2 Q And were you paid some consideration for
3 those patents?

4 A What do you mean "consideration"?

5 Q Any money?

6 A Yes, you do get a patent award.

7 Q And how much is that?

8 A It changed over a period of time. I
9 think in this one it mentioned \$1. I think it moved
10 to \$100 and then to 250. But I do not recall exact
11 sum.

12

13 (Gautam Exhibit No. 12 was marked.)

14

15 BY MR. GRISHAM:

16 Q I'm going to hand you Exhibit 12, which
17 relates to PM 1479. Ask you, first of all, have you
18 seen that document before?

19 A I do not recall.

20 Q Does that give you any further guidance
21 as to what 1479 was?

22 A Well, I mean, once again, going by the D
23 number, it was one of the invention disclosure,
24 D-934.

25 Q Okay.

1 A So that's all I can say.
2 Q Does the description of the invention --
3 A Yes.
4 Q -- tell you what it was?
5 A Says applying suspension of
6 polysaccharides in some pattern to modify the paper
7 porosity and burn properties. So it is in the
8 context of banded paper type things.
9 Q Was that concept patented, ultimately?
10 A I do not know for sure.
11 MR. CRAMPTON: This is -- these are the
12 patents. Does it help you to look at them?
13 A I think what it looks like to me is that
14 there were several disclosures filed which all were
15 combined under PM 1479. Okay? And PM 1479 is what
16 became this patent, which I read the name before,
17 5,263,999.
18 So there were several disclosures that
19 were combined to create one patent application which
20 resulted in this patent.
21 Q Okay.
22 A And the disclosures, like this one is a
23 separate disclosure because it's describing a
24 different type of material.
25 Q So several disclosures may have

1 ultimately --

2 A -- resulted in one patent.

3 Q Okay. What number we working with,
4 Number 13 there?

5 A Exhibit is 12.

6

7 (Gautam Exhibit No. 13 was marked.)

8

9 BY MR. GRISHAM:

10 Q All right. I'll hand you 13, which is --
11 purports to be the patent that you just read,
12 5,263,999. Is that a patent that was issued to you
13 as a coinventor?

14 A Yes.

15 Q And who were the other coinventors listed
16 on the patent?

17 A Sheryl Baldwin, Kenneth Houghton, Robert
18 M. Rogers, Judy Ryder.

19 Q And what date was that application filed?

20 A Says September 10, 1991.

21 Q And what date was the patent issued?

22 A November 23, 1993.

23 Q Was it also filed in foreign countries?

24 A I do not know for sure, but I believe it
25 probably was. But I do not know for sure.

1 Q What does -- what process or art does
2 Exhibit Number 13 deal with?

3 A It relates to the control of burn rate of
4 a cigarette. The burn rate is controlled by the use
5 of paper wrapper to which regions of cellulosic
6 material is applied and bonded. The cellulosic
7 material is applied during a manufacturing step for
8 the base paper wrapper, either off-line or on-line of
9 the paper wrapper-forming machine.

10 Q Okay. How was the application with the
11 patent marked as Exhibit 13 made? In other words,
12 was it moving orifice device, gravure printing or
13 some other method?

14 A I'll have to read the patent to -- I do
15 not recall exactly. It was a long time ago. This
16 patent refers mostly to modified gravure process.

17 Q Okay.

18 A Or a gravure process, printing process.
19 And also refers to a laboratory method of applying
20 bands.

21 Q And the technology that went into
22 applying for that patent that formed the basis for
23 that application was completed by the date of the
24 application; correct?

25 A Before filing the application?

1 Q Yes.

2 A Yes. I mean, there was a lab method that
3 we put together to show the concept that was done,
4 because we have examples showing it. And the gravure
5 process was also something that we put together in
6 the pilot scale or lab scale to show that we can make
7 this paper to prove the idea.

8 Q Right.

9 A So the technology was lab scale, pilot
10 scale technology before we filed the application.

11 Q Does the text of the patent marked as
12 Exhibit 13 indicate whether or not that method of
13 band application could be conducted on a commercial
14 scale?

15 A I'll have to read the whole -- but, you
16 know, this -- it does not -- any of the examples that
17 we show here, I don't think the examples show that it
18 was done in a commercial manner. It was done mostly
19 in the lab or pilot scale type processes.

20 Q Is there anything in the text of the
21 document that indicates whether or not the concept in
22 the patent could be achieved either commercially or
23 economically with mass production techniques?

24 A I'd have to read the whole patent to
25 answer.

1 Q Okay.

2 MR. CRAMPTON: Can we take a break while
3 he does it?

4 (Recess.)

5 BY MR. GRISHAM:

6 Q Mr. Gautam, we were looking at Exhibit
7 Number 14 before we took a break, which is a patent.

8 A 13.

9 Q And which you are a coinventor; correct?

10 A We're looking at Exhibit Number 13.

11 Q Oh, okay. I'm sorry. Number 13?

12 A Yes.

13 Q Which is a patent that you were a
14 coinventor --

15 A Yes.

16 Q -- with regard to? And I think you said
17 earlier that it dealt with a modified gravure
18 printing technique?

19 A Yes. It -- those are the examples used
20 in the patent.

21 Q Examples of what?

22 A Examples of the art. So the patent
23 refers to several examples, and those examples show
24 that the material was applied -- or the banded paper
25 was produced by a modified gravure process. But

1 the --
2 Q Was the process, then, the subject of the
3 patent marked as Exhibit Number 13?
4 A I would need some help on that, because
5 the claims are really for wrapper, for the paper.
6 Q Okay.
7 A Okay. So the claims are related to the
8 product, which is "product" meaning the paper.
9 MR. CRAMPTON: Is there a question
10 pending now?
11 MR. GRISHAM: Yes.
12 MR. CRAMPTON: And the question?
13 MR. GRISHAM: Could you read it back?
14 MR. CRAMPTON: Could you read that back?
15 (Record read.)
16 MR. CRAMPTON: I think he's answered that
17 question.
18 MR. GRISHAM: If he has, I'm probably
19 just confused. I don't understand.
20 BY MR. GRISHAM:
21 Q What is Exhibit Number 13 a patent
22 regarding? Is it a process? Is it a machine? Is it
23 a --
24 A Yeah, I'm reading the claim.
25 Q Okay.

1 A It does not say clearly whether it is a
2 product patent or a process patent. No patent says
3 that. But it refers to the cigarette paper and also
4 says that the -- and this one I'm reading right now,
5 actually, if you give me a minute.

6 Q Sure.

7 A It does not specifically reference to
8 modified gravure under the claims of the patent.

9 Q Okay.

10 A But it does refer to a method of applying
11 a fibrous cellulosic material. Okay? But most of
12 the claims are for the cigarette wrapper, itself,
13 saying -- and if I could read the number 1 claim, A
14 paper wrapper for a smoking article comprising a
15 paper base web with one or more regions of fibrous
16 cellulose applied and bonded to the paper base web,
17 wherein the fibrous cellulose is selected from the
18 group consisting of microcrystalline cellulose,
19 bacterial cellulose and microfibrillated cellulose,
20 and wherein the regions of fibrous cellulose comprise
21 between about .5 grams per square meter and about 10
22 grams per square meter (dry weight) on top of the
23 base paper.

24 So that claim, itself, is about the
25 paper.

1 Then one of the other claims is about A
2 method for making a smoking article paper wrapper
3 comprising a base paper web with one or more regions
4 of fibrous cellulose, said method comprising the
5 steps of: Advancing the base paper web along a
6 travel path which passes through a fibrous
7 cellulose-applying position; and applying cellulosic
8 material to said base paper web at said fibrous
9 cellulose-applying position so as to form one or more
10 regions of fibrous cellulose.

11 It describes the process under the
12 claims, but it does not specifically say what is the
13 process.

14 Q Okay. So, essentially, that -- Exhibit
15 13 is a patent that deals with making banded paper?

16 A Yes.

17 Q Okay.

18 A But it -- it says it is beyond the wet
19 end. So it is not about the moving orifice. It is
20 mostly after the moving orifice.

21 Q Okay. Since it's beyond the wet end,
22 then, then you know that's not a technique that would
23 benefit from the moving orifice device technology.

24 A It did not -- yes. I mean, it did not
25 refer to moving orifice at all, yeah.

1 Q All right. Is Exhibit 13 a patent that
2 claims that it can be used to make paper in
3 economically mass-produced quantities?

4 A Well, I mean, in the text it mentions
5 that, Furthermore, it is an object of this invention
6 to provide a banded paper wrapper that can be
7 manufactured in commercial quantities and in
8 conjunction with the commercial cigarette-making
9 operations without the need for non-conventional
10 apparatuses.

11 It says it can be mass produced. Okay?

12 Q Okay. And is that something you --
13 that's a part of your claim, then, for that patent is
14 that it could be mass produced?

15 A Once again, I'll have to go specifically
16 to the claim.

17 The claim does not mention anything with
18 regard to the mass production or anything.

19 Q Okay.

20 A As I read it. So it does not -- the
21 claim -- it does not claim that this could be mass
22 produced.

23 Q What did you just read to me a moment
24 ago? I'm sorry.

25 A It was from the text of the patent. It

1 wasn't from under the claims section of the patent.

2 Q I see. What is the difference between
3 the text of the patent and the claims section?

4 A I do not know. I'm not a patent lawyer.

5 Q Could I see Exhibit 13 just for a moment
6 before we move to the next one?

7 Is one of the summaries of Exhibit 13
8 that -- that the invention would provide wrappers
9 when used to make cigarettes would provide a
10 cigarette that looked, felt, tasted and burned like a
11 conventional cigarette?

12 A What is the question? I --

13 Q Sure. Is one of the objects of your
14 invention marked as Exhibit 13 to provide wrappers
15 that when used to make cigarettes provide cigarettes
16 with the advantage of looking, feeling, tasting and
17 burning like a conventional cigarette when being
18 drawn on by the smoker at normal intervals?

19 A That is one of the object of the paper --
20 the patent, yes.

21 Q Okay. And the next object is that the
22 invention would provide a paper wrapper in which a
23 banded area for controlled burn rate -- and I can't
24 read the next sentence. Can you read that?

25 A Are you on page number 3?

1 Q Yes.

2 A It is also an object of invention to
3 provide a paper wrapper in which a banded area for
4 controlling -- that one?

5 Q Yes.

6 A -- controlling burn rate can be applied
7 during manufacture of the base either off-line or
8 on-line of the paper machine.

9 Q Okay.

10 A But beyond the wet end of the paper
11 machine.

12 Q I see.

13 A So --

14 Q And the next summary object is that it
15 can be manufactured in commercial quantities and in
16 conjunction with commercial cigarette-making
17 operations without the need for non-conventional
18 apparatuses?

19 A That's what the patent reads, yes.

20 Q And the last summary paragraph on page 3
21 says, The paper wrapper of this invention may be used
22 for cigarettes of any length or circumference or
23 having different fillers; correct?

24 MR. CRAMPTON: Object to the form of the
25 question to the extent that you're referring to it as

1 a summary when the patent does not refer to it as a
2 summary.

3 BY MR. GRISHAM:

4 Q Would you look on the second page,
5 heading Summary of Invention?

6 MR. CRAMPTON: Okay. Objection
7 withdrawn.

8 A Yes. That's what it reads here, yes.

9

10 (Gautam Exhibit No. 14 was marked.)

11

12 BY MR. GRISHAM:

13 Q Okay. Let's look at Exhibit Number 14.
14 You may have a copy there. Ask you if you can
15 identify that one?

16 A Yes.

17 Q Is Exhibit 14 a patent that you were
18 issued as a coinventor?

19 A Yes.

20 Q When was the application for that patent
21 filed?

22 A In 199- -- September 1, 1993.

23 Q And when was it issued?

24 A May 23, 1995.

25 Q Is that a continuation of a prior patent?

1 A It says, The portion of the term of this
2 patent subsequent to November 23, 2010, has been
3 disclaimed.
4 Q Okay.
5 A Whatever that means.
6 Q Okay. Is Exhibit 14 a patent that was
7 issued that is a continuation of previous
8 application?
9 A Can I look at the previous patent again?
10 It looks like the same as Exhibit 13, but
11 some of the claims -- we're down to a smaller number
12 of claims in this new patent.
13 Q Okay.
14 A So it appears that it's connected to the
15 previous patent that we talked about, but some of the
16 claims from the previous ones -- there were a total
17 of fifteen claims in the previous patent. Some of
18 them were either taken out or were invalid or
19 whatever happened. This one refers to only seven
20 claims.
21 Q Okay.
22 A So some of the things were taken out.
23 Q Can I see it so I can ask you questions
24 about it? Thank you.
25 On page 1 it's described in the heading

1 Smoker Article Wrapper for Controlling Burn Rate and
2 Method for Making the Same.
3 A Uh-huh.
4 Q Correct?
5 First paragraph under there, this is what
6 I'm referring to, which I think maybe your
7 recollection matches this, it says it's a
8 continuation of prior application, and it gives the
9 number which is now Patent Number 5,236,999?
10 A Yes.
11 Q And that is Exhibit 13; correct?
12 A That is right, yeah.
13 Q Okay. And moving to page 3, Summary of
14 the Invention. Paragraph 2, does it purport to
15 provide wrappers which have the advantage of looking,
16 feeling, tasting and burning like a conventional
17 cigarette when drawn on by the smoker at normal
18 intervals?
19 A What is the question?
20 Q Is that what one of the objects of the
21 invention is?
22 A Yes. That's what it reads, yes.
23 Q Okay. And a second object listed in the
24 next paragraph is to provide a banded area for
25 control of the burn rate of the paper, either

1 off-line or on-line --
2 A Yes.
3 Q -- of the paper machine; correct?
4 A Yes.
5 Q And like you said before, either -- but
6 beyond the wet end of the paper machine.
7 A That's correct.
8 Q Okay. And the next paragraph says that
9 it's the object of the invention to provide a banded
10 paper that can be manufactured in commercial
11 quantities and in conjunction with commercial
12 cigarette-making operations without the need for
13 non-conventional apparatuses; correct?
14 A That's what it reads. It can be
15 manufactured.
16 Q Okay. Do you agree with that?
17 A Yes.
18 Q With regard to Exhibit 14, what is the
19 chemical or physical makeup of the cellulosic
20 material used for the band that's the subject of this
21 patent?
22 A I think if you look at the claim number
23 7, the last page.
24 Q Okay.
25 A It says, The method of claim 6, wherein

1 said fibrous cellulose consists essentially of
2 microcrystalline cellulose, said fibrous cellulose
3 applying step b) further comprises applying to said
4 paper base...

5 So the -- it refers to the fibrous
6 cellulosic material, and it specifically mentions
7 microcrystalline cellulose.

8 Q Is that for the base paper or for the
9 bands?

10 A This is for the band.

11 Q Now, in the previous patent that this is
12 a continuation of, and the previous patent being
13 Exhibit 13, is there a claim made for, likewise, the
14 makeup of the materials formulating the band?

15 A Yes, it does. It also --

16 Q Is it essentially the same, or did it
17 change between patent Exhibit 13 and Exhibit 14?

18 A It appears to me that there are some
19 changes here. The Patent Number 5,263,999 refers to
20 fibrous cellulose. Then it goes on in saying that
21 the fibrous cellulose is selected from a group
22 consisting of microcrystalline cellulose, bacterial
23 cellulose and microfibrillated cellulose. And under
24 the claim 2 it also says that the regions of fibrous
25 cellulose. Fibrous cellulose include a binder.

1 Q Okay.
2 A Okay? In the next patent, which is
3 5,417,228, it does not refer to binder and some other
4 forms of cellulose.
5 Q Do you recall what the conceptual change
6 was between the two patents in regard to the material
7 making up the band? In other words --
8 A What do you mean?
9 Q Yeah. '263,999 had a binder?
10 A Uh-huh.
11 Q And, apparently, 5,417,228 didn't have
12 the binder?
13 A Uh-huh.
14 Q Is that the only change made in the
15 content of the cellulosic fiber?
16 A Well, the Exhibit 14 also does not
17 specifically mention, under the claims, bacterial
18 cellulose and microfibrillated cellulose.
19 Q I see. So, basically, Exhibit 14 is more
20 specific in what the cellulosic material would be.
21 A That's what it looks like.
22 Q Okay. And Exhibit 13 gave some options.
23 A Yes.
24 Q I see.
25 A So 13 is more broader, and then it

1 narrows down a little bit.

2 Q I see.

3

4 (Gautam Exhibit No. 15 was marked.)

5

6 BY MR. GRISHAM:

7 Q Okay. The next exhibit is Number 15, and
8 it's Patent Number 5,474,095, if you could look at
9 that and see if you can identify it for us.

10 A Yes.

11 Q And is that a patent that was issued to
12 you as a coinventor?

13 A Yes, correct.

14 Q When was the application for that patent
15 made?

16 A The application was filed in 1994.

17 Q And when was it issued?

18 A It was issued on December 12, 1995.

19 Q What does that patent deal with?

20 A Well, this patent deals with the
21 method -- well, This invention refers to paper having
22 cross-directional regions having increased basis
23 weight. The paper of this invention is especially
24 useful as a wrapping material for a smoking article.
25 The paper may be produced by depositing additional

1 material onto a moving base web in a papermaking
2 machine. The additional material is deposited by
3 means of a rotating drum containing a plurality of
4 slits through which the additional material passes.

5 It refers to what I was previously
6 describing as a daubing dandy.

7 Q Okay.

8 A And it refers to the wet end application
9 of the bands during the papermaking steps.

10 Q Does Exhibit 15 claim that the process
11 can be made to make a paper that when used to wrap a
12 cigarette will look, feel, taste and draw like a
13 conventional cigarette?

14 MR. CRAMPTON: You're talking about the
15 claims?

16 MR. GRISHAM: Yeah, any portion, summary
17 of the invention or any claims.

18 A I do not see it in the -- anywhere in the
19 text of the patent.

20 BY MR. GRISHAM:

21 Q Let me look at it. Maybe I can find
22 specifically where it's talked about. Thank you.

23 Now, Exhibit 15, was it a continuation of
24 these prior two patents, '999 and '228, or was it
25 something that was independent?

1 A This one is a separate one.

2 Q Okay. Again, is it -- is it a process
3 for papermaking, or is it -- or is it some -- does it
4 deal with some other application?

5 A Once again, if you look at the claims, it
6 includes both the paper, itself, and also the process
7 for making it, just like the previous ones.

8 Q Now, having just reviewed Exhibit Number
9 15, you've indicated it doesn't mention anything
10 about commercial capabilities; correct?

11 A I didn't find anything.

12 Q Nor does --

13 A Any reference to --

14 Q I'm sorry. Didn't mean to walk on you
15 there.

16 A I didn't find any reference to
17 commercial, you know, nature of the process.

18 Q And it doesn't say anything about
19 creating a wrapper that would look, taste, feel or
20 draw like a conventional cigarette; correct?

21 A I did not find any reference in the
22 patent for that.

23 Q Fair enough.

24

25 (Gautam Exhibit No. 16 was marked.)

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BY MR. GRISHAM:

Q Now, I think this one may go a little quicker, Exhibit 16. Can you identify that, please.

A Okay.

Q Is that a patent that's been issued to you as a coinventor?

A Yes.

Q Does it deal with the making of cigarette papers at all?

A No.

Q Does it deal with any aspect of reduced ignition propensity qualities of cigarettes?

A No. It relates to the filter materials.

Q It's a filter patent?

A Yes.

Q Okay. Thank you.

(Gautam Exhibit No. 17 was marked.)

BY MR. GRISHAM:

Q Now, let me hand you what's been marked as Exhibit 17 and ask you if you can identify that document?

A Yes.

1 Q What is Exhibit 17?
2 A It's also a patent on banded paper.
3 Q And it was issued to you as a coinventor,
4 along with other individuals, many of whom were from
5 Philip Morris; correct?
6 A That is correct, and also from Kimberly
7 Clark or Schweitzer Mauduit.
8 Q Is Patent Number 5,997,691 a result of a
9 collaboration between Philip Morris and other
10 industrial companies, such as Kimberly Clark?
11 A That is correct.
12 Q I notice one of the inventors listed is
13 Vladimir Hampl?
14 A That's correct.
15 Q And he has some patents for banded paper,
16 other than this one, doesn't he?
17 A I think so.
18 Q And you mention, besides Kimberly Clark,
19 another company that some of these individuals who
20 were coinventors worked for?
21 A Yes. There's a guy here on this patent
22 from the company I mentioned before, Jewett.
23 Q Okay.
24 A Ed Cutright. So he's from the other
25 company.

1 Q And he has some individual, separate
2 patents besides this one, doesn't he?

3 A I think he's also one of the inventors of
4 the moving orifice device.

5 Q All right. Patent Number 5,997,691 was
6 issued December 7, 1999; correct?

7 A That's correct.

8 Q The application was filed July 9, 1996?

9 A That's correct.

10 Q Does Patent 5,997,691 deal with the
11 moving orifice device?

12 A Yes, it does.

13 Q Is this patent the basis for the moving
14 orifice device that is currently used to create
15 PaperSelect at Philip Morris?

16 A Yes. This is -- the moving orifice
17 device is the process used for that paper.

18 Q This patent was also assigned to Philip
19 Morris, Incorporated; correct?

20 A Yes.

21 Q Do you know of any tests or applications
22 done of the modified gravure printing method that
23 were actually resulted in commercial quantity bolts
24 or bobbins of paper being produced which were
25 ultimately used to wrap cigarettes which were sold to

1 the public?

2 A I do not know that.

3 Q Do you know if any cigarettes using the
4 modified gravure method for applying bands were ever
5 used to create cigarettes that were subjectively
6 tested by panels of subjects used to determine
7 subjective qualities?

8 A I -- I was not involved, but they may
9 have been tested. I do not know for sure. But it is
10 normal practice to, if you produce cigarettes, they
11 would test them subjectively also, if they're
12 approved for subjective testing.

13 Q The modified gravure method that we've
14 talked about earlier, what quantities of paper could
15 be produced using that method, to your recollection?

16 A Well, I mean, the modified gravure
17 process that we scaled up at Kimberly Clark in '93
18 and '94 could produce, I do not recall exactly, but
19 hundreds and two hundreds of bobbins at one time.

20 Q How many?

21 A Hundred, two hundred, even more.

22 Q And how much paper is in a bobbin?

23 A It varies. But it could be about 6 to --
24 6500 meters of paper.

25 Q 6500 meters?

1 A 6500 meters. 6500 meters.
2 Q Okay. And it could produce how many of
3 those at once?
4 A Hundred, two hundred bobbins of those.
5 Q With the bands applied?
6 A With the bands applied.
7 Q How long would it take them to produce
8 that much paper using the modified gravure method?
9 A Probably take about two to three hours.
10 Q How many cigarettes would that make?
11 A One bobbin can make up to -- I think up
12 to a hundred thousand cigarettes.
13 Q And could that -- could those bobbins
14 using that method for band application be used in a
15 conventional cigarette wrapping machine to make the
16 cigarettes?
17 A Yes.
18 Q Now, the patent that you have before you,
19 5,997,691, does it deal with methods for quality
20 control for maintaining the quality of the band,
21 itself; in other words, having the slurry be uniform
22 and uniform in its application and its ultimate
23 constituency in the end product?
24 A Yes. This patent refers to some of the
25 process controls to make the paper more uniformly.

1 Q Okay. How, then, does the patent provide
2 for making better uniformity of the band?

3 A It has -- it talks about certain controls
4 that are put into the process which are described
5 here that controls the pressure in the chamber
6 through which the moving orifice or the belt with
7 holes in it goes through to make the band application
8 across the cigarette paper machine more uniform and
9 controllable.

10 Q When were the last modified gravure
11 printing method trials conducted where all these
12 multitude of bobbins were created?

13 A When was the last one done?

14 Q Yes.

15 A If I recall correctly, I think -- the one
16 I was involved in was back in 1994.

17 Q Okay. Were the trials back in 1991 such
18 that large quantities of bobbins were --

19 A No, I said 1994.

20 Q Right. That was the last ones you were
21 involved in. In '91 there were the Beloit trials,
22 though; right?

23 A But the Beloit trial were at the wet end
24 of the paper machine. They were not the dry end.
25 When I refer to modified gravure, it is the dry end

1 with Kimberly Clark. That's where we produced the
2 larger quantities of bobbins.

3 Q I see. Thank you for clearing that up.
4 When were the large quantities of bobbins
5 first made with Kimberly Clark?

6 A I believe it was in 1993.

7 Q And, again, that was as a result of this
8 joint agreement between Kimberly Clark and Philip
9 Morris?

10 A Yes. We worked jointly on that project.

11 Q Let's talk about the PaperSelect product
12 for a moment, if we could.

13 Do you -- are you aware of what the band
14 constituency is that's used in PaperSelect?

15 A No, I do not. As I said, a lot of that
16 work was done after I was out of this project in 1996
17 and assumed other responsibilities. So I wasn't
18 directly involved in that PaperSelect, Merit Select
19 program.

20 Q Is PaperSelect, though, a product that
21 uses a cellulosic band?

22 A Yes, it uses the cellulosic band.

23 Q Is it -- is the band applied to the paper
24 using the moving orifice device?

25 A I believe so.

1 Q And it's manufactured by an outside
2 vendor, which is now Schweitzer?

3 A Schweitzer Mauduit.

4 Q Schweitzer --

5 A -- Mauduit.

6 Q Which, formerly, was Kimberly Clark?

7 A That is correct.

8 Q And it is capable of producing mass
9 quantities of cigarette paper which will work on
10 conventional cigarette-making machines?

11 A That's -- that's the -- we're producing
12 the paper that is used on a commercial cigarette
13 paper machine, yes.

14 Q Now, we talked earlier in the deposition
15 about different Coresta measurments for paper that
16 may have been available 1989, 1990 when you started
17 the banded project.

18 During that time period do you -- were
19 you aware of any paper being created with higher
20 Coresta units, like 80, 100 Coresta paper?

21 A Back in '89?

22 Q Yes.

23 A I do not recall anything.

24 Q Is there something about -- based upon
25 your knowledge and experience, do you think that's

1 something that technology had not -- was not capable
2 of producing at that time, or is there some other
3 explanation for why you didn't see that sort of
4 paper?

5 A I think the technology to produce high
6 Coresta paper is essentially the same. I don't know
7 why it wasn't produced or why -- I just don't know.
8 It --

9 Q Sorry.

10 A I do not know.

11 Q Do you know what the properties of the
12 base paper are on PaperSelect?

13 A I do not know exactly what the properties
14 are.

15 Q Do you have a general idea of the concept
16 of what the paper is?

17 A It's probably one of the normal or
18 conventional cigarette paper that we use in other
19 cigarettes. It's not too much different. But I do
20 not know which exact paper it is. So it's in the
21 same neighborhood as other cigarettes use.

22 Q So, essentially, the PaperSelect product
23 is different in the sense it has bands incorporated
24 made of cellulosic material?

25 A That's correct.

1 Q Applied through some form of moving
2 orifice device.

3 A Yes.

4 MR. GRISHAM: Pass the witness. Thank
5 you.

6 MR. CRAMPTON: I don't have any
7 questions. So that's it.

8

9 (The deposition concluded at 1:05 p.m.)

10

11 And further this deponent saith not.

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7 I, NAVIN GAUTAM, have read the foregoing
8 deposition and hereby affix my signature that same is
9 true and correct, except as noted above.
10

11 NAVIN GAUTAM
12

13 THE STATE OF TEXAS

14 COUNTY OF

15 Before me, , on this day
16 personally appeared NAVIN GAUTAM, known to me
17 to be the person whose name is subscribed to the
18 foregoing instrument and acknowledged to me that they
19 executed the same for the purpose and consideration
20 therein expressed.

21 Given under my hand and seal of office this
22 day of .
23

24 NOTARY PUBLIC IN AND
25 FOR THE STATE OF TEXAS

1 CAUSE NO. 262-94

2
3 VICKI STACKS, as Next Friend IN THE DISTRICT COURT
of Shannon Moore, A Minor,

4 Plaintiff,

5 v.

6 PHILIP MORRIS INCORPORATED; JOHNSON COUNTY, TEXAS
PHILIP MORRIS U.S.A.; and
7 SHELLY MOORE,
8 Defendants. 18TH JUDICIAL DISTRICT

9
10 REPORTER'S CERTIFICATION
11 DEPOSITION OF NAVIN GAUTAM

12 November 6, 2000

13 I, Valarie L. Schmit, RPR, in and for the State of
14 Virginia, hereby certify to the following:

15 That the witness, NAVIN GAUTAM, was duly
16 sworn by the officer and that the transcript of the
17 oral deposition is a true record of the testimony given
18 by the witness;

19 That the deposition transcript was submitted on
20 to the witness or to the attorney for
21 the witness for examination, signature, and return to
22 me by ;

23 That pursuant to information given to the
24 deposition officer at the time said testimony was
25 taken, the following includes counsel for all parties

1 of record:

2 MR. ROBERT B. WALTMAN, ATTORNEY FOR PLAINTIFF

3 MR. LYNN GRISHAM, ATTORNEY FOR PLAINTIFF

4 MR. WILLIAM J. CRAMPTON, ATTORNEY FOR PHILIP

5 MORRIS INCORPORATED and PHILIP MORRIS U.S.A.

6 I further certify that I am neither counsel for,
7 related to, nor employed by any of the parties or
8 attorneys in the action in which this proceeding was
9 taken, and further that I am not financially or
10 otherwise interested in the outcome of the action.

11 Further certification requirements pursuant to
12 Rule 203 of TRCP will be certified to after they have
13 occurred.

14 Certified to by me this day of
15 , 2000.
16
17
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19
20

Valarie L. Schmit, RPR

21 Expiration date: 6/30/04
22
23
24
25

1 FURTHER CERTIFICATION UNDER RULE 203 TRCP

2 The original deposition {was / was not} returned
3 to the deposition officer on .

4 If returned, the attached changes and signature
5 page contains any changes and the reasons therefor:

6 If returned, the original deposition was delivered
7 to , Custodial Attorney;

8 That \$ is the deposition officer's
9 charges to the Plaintiff for preparing the original
10 deposition transcript and any copies of exhibits:

11 That the deposition was delivered in accordance
12 with Rule 203, and that a copy of this certificate was
13 served on all parties shown herein on and filed with
14 the Clerk.

15 Certified to by me this day of
16 , .

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Valarie L. Schmit, RPR

21 Expiration Date: 6/30/04

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